City of Cambridge.

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THE MAYOR'S ADDRESS

AT THE

ORGANIZATION OF THE CITY GOVERNMENT

JANUARY 7, 1895,

AND

THE ANNUAL REPORTS

MADE TO THE CITY COUNCIL,

FOR THE YEAR 1894.

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ADDRESS

OF

HON. WILLIAM A. BANCROFT,

MAYOR,

TO THE

CITY COUNCIL,

JANUARY 7, 1895.

Gentlemen of the City Council:

Met to assume duties assigned to us by our fellow-citizens, let us briefly consider what is expected of us.

The corporate powers of our city, whether legislative or executive, and wherever placed, have but one purpose—the judicious administration of a public trust. What is judicious is, indeed, not always apparent. Perplexities will arise. The worse will sometimes appear the better reason, but in this community an eye single to the interests of the city is more likely to be used by the public than is a keener one with a double vision. Fidelity here is accorded precedence.

While by law certain concerns such as the public health and the public schools are entrusted to public officers over whose doings we have no control, yet through the appro-

priations or otherwise there are but few public local interests that we do not consider.

The general financial policy of the city — suitable provision for both present and future — so often and so emphatically approved at the polls, demands foresight in plan, discrimination in appropriation, and economy in expenditure. To develop the city along the lines now clearly established, and to provide within the limits of reasonable expenditure for the immediate needs of the public will be our uppermost care.

The costly public works of utility and of adornment already undertaken will require our attention. The needs of the several departments, in some cases increased by the city's growth or by changed conditions, must be scrutinized. Abundant information we shall welcome. Ample deliberation must be given.

It will not be amiss to say again, what from this place has been many times said, that needs ought to be distinguished from wants. Confusion of the two, more than anything else likely to take place, is calculated to breed financial evil. Let the distinction be made.

For information and suggestion I commend to you the various departmental reports required to be made to your immediate predecessors. It will not be attempted to review them all in this address. Some few things, however, I desire to say, and first of the

FINANCES.

	Nov. 30, 1893	Nov. 30, 1894	Decrease	Increase
Funded City Debt	$2,216,000 00	$2,721,000 00	.....	$505,000 00
Sinking Funds	632,815 14	628,289 05	$4,526 09	.....
Net Funded City Debt	$1,583,184 86	$2,092,710 95	.....	$509,526 09
Funded Water Debt	$1,861,500 00	$1,975,500 00	.....	$114,000 00
Sinking Fund of W. W.	686,867 26	612,084 75	$74,782 51	.....
Net Funded Water Debt	$1,174,632 74	$1,363,415 25	.....	$188,782 51
Net Valuation	$75,314,935 00	$76,445,212 00	.....	$1,130,277 00
	1894	1895		
Borrowing Capacity	$1,130,516 51	$728,796 16	$401,720 35	.....
Limit of Taxation for Municipal Purposes, outside of the Sinking Fund requirements, Interest on the Debt and	1894	1895		
State and County Tax	$897,657 40	$917,342 54	.....	$19,685 14

The increase in the water debt is due to the large works, of which mention will be made later. It will be met from water revenues.

The increase in our city debt is due chiefly to parks and streets. It is a part of a well-considered plan of municipal development, and a further increase is expected. There is yet much to be done for parks, but the reasonable limit of street widening, and the extension of main thoroughfares has been nearly reached. While, therefore, some further loans must be made, the greatest care should be exercised to restrict them to undertakings of clear public benefit. It

is believed, too, that the public welfare for the present requires restriction in current expenses. Our plans have been adopted and the municipal house will be built with all convenient speed, but there will be time enough to provide costlier appointments after the house is done, and a larger income is assured. Absolute needs must be met. There should be no deterioration nor neglect. Beyond this, however, expenditure should not be incurred, and much that is desirable, but not necessary, ought to wait upon the more abundant resources that are likely to result from the prudent execution of the broad plans to which our fellow-citizens have assented.

PARKS.

During the year, upon the recommendation of the Park Commissioners, the city has taken much of the land bordering upon the Charles River between Craigie Bridge and the hospital grounds on Mt. Auburn street, in area about 90 acres, making the total area now devoted to park purposes, including the Fresh Pond Park, about 477 acres. It is proposed to acquire about 24 acres more on the river bank, making a practically continuous river parkway between the points first named. Much work has been done in filling and grading Cambridge Field, so designated. Upwards of 30,000 cubic yards of material of the 70,000 estimated to be required have been deposited thereon, and the portion of the field bordering on Cambridge street has been prepared for tree planting and for final treatment. Filling has also been done near Captain's Island, as well as near Murray street, and in this latter place the removal

of buildings has been begun. Rindge Field has been put in condition to be used as a ball field and playground, and there a new fence has been built. There, too, a nursery now containing 2,500 young trees has been established. To the Park Department has been transferred the care of shade trees and public grounds, formerly assigned to the Street Department, and a comprehensive treatment thereof has been inaugurated. The Commissioners have been unwearied in their labors, and two, President Yerxa and Mr. Cox, have been able during the year to study established systems abroad. The report which the Commissioners have made to the City Council will be read with much interest. Among those accompanying it, I desire especially to call your attention to the admirable statement of the General Superintendent.

The work of the commission has thus far been highly satisfactory. The problems to be solved were neither few nor easily mastered, and that so much has been done, and so well done, affords the people of Cambridge cause for hearty approval. Of the many boards and individuals who have devoted, and still devote, time and effort both gladly and freely to our beloved city, none, for an equal period, has deserved higher praise for loyal and efficient service than the present Board of Park Commissioners.

WATER.

More vitally important, long successfully administered, and now about to be doubled in quantity, is our water supply. Weighty, indeed, have been the burdens upon the Water Board during the past 12 months.

First came the choice between the use of our rights upon Hobbs Brook and a reliance upon a Metropolitan supply. The latter supply was, and still is, undetermined. If the Metropolitan plan proposed is adopted, it will yet be years before the water is available. Our present supply is of doubtful adequacy, even for our present needs. In any event, the Hobbs Brook supply will be needed. The Hobbs Brook supply was chosen.

Second, the question of route — whether direct for a portion of the year, or as at present, at all times, a grave question of engineering — was determined after consulting most eminent experts.

Third, the sites of the dams, and the treatment of the basin for reception and storage.

Fourth, the taking of land properties, and settlement therefor.

Fifth, the adjustment of questions arising between our city and the municipalities of Waltham, Lexington and Lincoln.

Sixth, the advantageous employment of Cambridge citizens upon the work of construction.

To these subjects for determination, were added the purchase of new pumping machinery, to double the present capacity; the preparation and award of a contract for the construction of a high service reservoir at Payson Park, and other subsidiary questions, relatively less important, but all of magnitude. The determinations already reached, so far as I have knowledge of them, (and I have personally considered the more important questions,) I believe to be correct.

To the members of the Board who, giving generously their time and abilities to the public, with patient investigation and careful deliberation, have solved these serious problems, the people of our city are greatly indebted.

During the year the adoption of a schedule prepared by the Board, reduced the water rates about $23,000.00. The Board has caused to be taken the slope bounded by the Fitchburg railroad, Huron street and Fresh Pond lane, and by its action the city now possesses the entire immediate basin in which Fresh Pond lies. The employment of landscape architects to prepare plans for the adornment of the Fresh Pond Park is much appreciated. You will read with attention the report of the Board, together with those of the department officials that accompany it.

SCHOOLS.

The Superintendent of Schools has kindly furnished the following statistics for 1894:

Number of pupils on the first of December	11,924
Number of teachers	312
Cost of the day schools, not including expenditures for new school houses	$287,137.37
Increase over last year	13,083.55
Cost per pupil	25.72
Increase per pupil	.91

It is noted that in the last eight years the cost per pupil has increased $3.21. I have no reason to suppose that the advantage to the pupil has not been corresponding.

POLICE AND FIRE.

The work of the Police and Fire Departments has been in the main satisfactory. As a rule, I believe the police have been faithful and efficient. They certainly have been held to a strict accountability. The Chief recommends an addition of four patrolmen. It is understood that with scarcely an exception our city has a larger relative force than any other in the State. But in some parts of the city an increase has been desired. By law the Board of Aldermen fix the number of police. The governing consideration should be the actual needs of the city.

The Fire Department has sustained its reputation for promptness and efficiency. The fire losses have been relatively small. For the new house on Main street another company will be organized during the year.

BUILDINGS.

Not until about nine years ago was provision made for the inspection of private buildings, or for a paid supervision of the construction and repair of public buildings. For seven years but a single official was permanently engaged, and only within a year has provision been made for two others. Clearly, efficient supervision and thorough inspection requires a larger number, and, it may be, a different arrangement. The financial consideration, however, must control.

An engine house and a school house are now approaching completion. Lots have been bought for a new Latin School building, a new primary school house, and another engine house, the work of changing the sanitary arrange-

ments in certain school houses has been continued, and ordinary repairs have been made. During the year 600 building permits have been issued — the highest number yet recorded in a single year. By the discontinuance of the rifle range at Cider Mill Pond it will be necessary, in compliance with the law of the State, for the Board of Aldermen to supply another range.

BRIDGES.

The Commissioner has managed this department on behalf of our city with prudence. If the separation of grades on Prison Point street is undertaken, it may be necessary to rebuild the bridge thereon.

SEWERS.

During the past year there have been built 1.751 miles of sewers, making the total length of sewers 95.249 miles. The total cost to date has been $1,170,295.46. The work has all been done by day labor under the general direction of the City Engineer.

It is expected, says the City Engineer, that the branch of the Metropolitan sewer with which our system is to connect will be in use sometime in the spring. The principal connection in Binney street and Commercial avenue is now nearly completed, but the construction of the inverted syphon under the canal has been a difficult undertaking.

STREETS.

Unless it be the weather, I know of nothing more the subject of abuse than are the streets of Cambridge. That the abuse is as thoughtless in the one case as it is in the other may be surprising, but the fact remains. Nevertheless, you will make an appropriation for the Street Department commensurate with the resources of the city, and this appropriation will be reasonably sufficient for street needs.

The first duty of the Surveyor of Highways is clearly to keep all the accepted streets in a safe condition for public travel. After provision has been made for this, there are funds enough to do some paving and some macadamizing (or asphalting, if it should be deemed better), and some gravelling. Besides this, under the control of the Board of Aldermen, sidewalks of gravel and stone dust, with or without curbstones, are to be built, as well as sidewalks of brick. Crossings also are to be laid by the Surveyor. All these and nothing more out of the tax levy.

New streets may be built and old ones raised, widened, or radically changed by loans. Such has been the approved policy of the city for years, and such in my opinion, ought the policy to be for some time to come. Such, certainly, it will have to be, in the main, until the legislature removes the limit of municipal expenditure.

During the year the erection of a second stone crushing plant has made the cost of cracked stone to the city less than ever. Besides the work of the loan class upon Huron avenue, Mt. Auburn, Harvard, Norton, and Dav-

enport streets, the tax levy has met the paving on Western avenue and the macadamizing or gravelling of 26 streets or portions of streets, the setting of 9,394 feet of curbing, and the laying of 7,515 square yards of brick paving and 2,500 feet of crossing, together with the cost of materials therefor.

The total accepted street mileage is now 84.194, including 2.296 miles accepted during the past year.

THE SEALER OF WEIGHTS AND MEASURES

reports that the number of hawkers and pedlers has increased to such an extent that it is difficult to detect those among them who are disposed to make use of illegal measures. To correct this he suggests a remedy.

CEMETERY.

This department has been carefully administered. A new fence of iron has been built on either side of the gateway at the Cambridge Cemetery, and this with the new gateway and changes in Coolidge avenue has made the entrance to the cemetery entirely suitable. An additional "Soldiers' and Sailors' lot" of ample extent has been assigned. The lot is near the entrance, is conspicuous and beautiful, and will be treated in a manner befitting a memorial of patriotism.

WIRES AND LAMPS.

The consolidation and comprehensive supervision of the several systems of wires has resulted advantageously to the city, but a suitable legislative provision for underground

conduits is yet to be enacted. Such a provision is much desired.

In view of the order passed by last year's City Council, having for its object the acquisition of the electric light company's plant, I suggest the importance of the appointment of a special committee with full power to consider the subject of municipal lighting. The city now uses 302 street gas lamps. The equipment of several lamps with the Welchbach burner, a device said to give a greater illumination with a reduced consumption of gas, will prove instructive.

POOR.

The cost of caring for the poor was about $5,000 more than it was during the year preceding, but fortunately the receipts were over $4,000 larger, so that the net cost was not much increased. The difficult task assigned to the Overseers of the Poor continues to be well done.

Work upon sewers and in the Water Department gave relief last winter to a large number of men. Many needy women were also given employment by means of a fund raised by subscription and expended under the direction of public-spirited ladies, acting with a committee of citizens, whose labors resulted in preventing much pauperism.

HEALTH.

Under this head is comprised the work not only of the Board of Health with its large powers, but also the work of the Inspector of Milk and Vinegar, and the work of the

Inspector of Provisions and Animals Intended for Slaughter or Kept for the Production of Milk. Cleanliness and purity are the ends in view, but the appropriations therefor cannot be large. It is respectfully suggested that, if the custom of sweeping filth and rubbish into the street were discontinued, much would be gained. The Street Department intends to provide receptacles for waste paper and sweepings in the more frequented business sections of the city, but a change of the right sort in individual habits would be welcomed.

The adoption of a provision for a physician to the Board of Health has resulted in preventing much exposure of school children to contagious diseases. An inspection of ice has been made by Dr. Dunbar, but the sale of impure ice cannot be restrained without further legislation. The Inspector of Provisions has made a physical examination of 598 animals, and, so far as he could determine, they were free from contagious diseases. A tuberculosis test will be made later by the Cattle Commissioners.

PUBLIC LIBRARY.

The addition to the public library has been completed and is in use. Upon the lower floor is a reading room for children, the office of the librarian, and space for other purposes. Upon the upper floor, besides a room for the trustees, there is a large apartment which may be used for a reference library of American history. The work of construction I believe was done most excellently well, and by means of the new rooms the usefulness of the library will be greatly increased.

The number of books added to the library during the year has been 2,724, making the total number (estimated) 46,770. The circulation has been 119,631, besides 5,768 from the stacks for use in the reference room and the use of the reference library of 2,000 volumes. In truth, the people of Cambridge are not avoiding this fountain of knowledge. May its use be extended.

FREDERICK H. RINDGE.

Not since the first announcement of what Mr. Rindge proposed to do for Cambridge have its people been so much pleased as they were at his visit last summer. The numbers who crowded to the City Hall to greet him, although it was known only a few hours before that he was to be within its walls, gave some indication of, but only partially expressed, the universal pleasure felt because the benefactor of the city had honored it with his presence. Personal contact with the man did not fail to increase our gratitude, but it also enabled us to observe the possession of many high qualities of head and heart, besides that of generosity, if, indeed, that is a proper term to describe sufficiently such lofty devotion as is his. We doubt not that a more exalted motive has inspired him, and yet we are glad that we have been permitted to take him by the hand and to thank him.

RECOMMENDATIONS.

After considering the estimates of money required by the various departments, I shall be able to state more fully what I think ought to be undertaken by the city during

the current year. I now make the following recommendations:

1. That plans be prepared for a Latin High School-house to be hereafter built.

2. That Boylston street be widened.

3. That a conference with the City of Somerville be proposed to make arrangements for the construction of a sewer to receive the sewerage now emptying into Muller's Brook.

4. That a conference with the Town of Belmont be proposed to make arrangements for draining Bird's Pond.

5. That an ordinance be passed to provide for the suitable licensing of hawkers and pedlers.

6. That the expediency of acquiring additional ledge property near the alms-house be considered.

7. That another steam road roller be bought.

Gentlemen of the City Council: We are the servants of a worthy people. The place where we live nature has blessed in many ways. It has been determined that nature shall be aided by art. There will be here in the not distant future a city of surpassing beauty. Here will be public buildings whose simple grandeur will impress the beholder. Private dwellings, also, spacious and pleasing will meet the eye. Here, too, will be heard the hum of great industries. Public works of vast design, essential to health, convenience and comfort will be completed. Parks and drives and walks and waterways we shall have, and with them landscape views of varied loveliness. The charm of river and lake and hillside will be ours. Between

rows of stately elms or other trees of luxuriant foliage, many streets will delight the stranger no less than they will satisfy the dweller thereon. Here are institutions where charity and religion will console the unfortunate and soothe the afflicted; institutions, also, where intellect and character will expand in that culture which increases the flower of American manhood and womanhood. Here are historic associations of momentous times, and from here has gone out to the world the fame of the country's foremost university. To these distinctions Cambridge will add the fortunate possession of public order born of true municipal greatness. Material wealth will increase, but no more rapidly, I believe, than will the moral vigor which shapes the purposes of our prosperous community.

And now a word in closing. To sustain and direct us in the performance of our duties the aid of the Supreme Ruler has been invoked. We remember that "with Him is strength and wisdom, He hath counsel and understanding." Trusting to His guidance, with courage, discretion, and devotion, let us serve the city that we love,

"As though there were a tie
And obligation to posterity."

ANNUAL REPORTS.

ANNUAL REPORT OF THE CITY AUDITOR.

CITY AUDITOR'S OFFICE,
CAMBRIDGE, December 1, 1894.

To the Honorable the City Council : —

The undersigned herewith presents the annual statement of the receipts and expenditures of the City of Cambridge for the fiscal year beginning on the first day of December, 1893, and ending on the thirtieth day of November, 1894, together with a schedule of the city property.

Respectfully submitted,

HARRY T. UPHAM,

City Auditor.

Balance in the Treasury November 30th, 1893			$53,475 56
The receipts from all sources from December 1st, 1893, to November 30th, 1894, were as follows: —			
From City Departments		$236,837 43	
Water Works		291,834 61	
Taxes: —			
City	$1,260,420 95		
Corporations	61,211 35		
National Banks . . .	16,480 92		
Sale Surplus	34 00		
		1,338,147 22	
Temporary Loans in anticipation of taxes		125,000 00	
Sale of Bonds: —			
For Public Buildings (School and Engine Houses and Public Library)	$118,000 00		
Parks	360,000 00		
Metropolitan Sewer Connections . . .	75,000 00		
Extension and Widening of Streets . .	82,000 00		
Extension of Water Works	300,000 00		
		935,000 00	
Perpetual Care of Lots in Cambridge Cemetery.		1,781 75	
Commissioners of Sinking Funds, for payment of Funded Debt, maturing in 1894		130,000 00	
Trustees of Sinking Fund of Water Works, for payment of Water Loan Bonds maturing in 1894		186,000 00	
Total receipts			3,244,601 01
Amount carried forward			$3,298,076 57

Amount brought forward .			$3,298,076 57
The payments have been as follows: —			
For City Departments . . .		$1,836,141 39	
Water Works		420,688 47	
Cemetery Fund (invested) .		1,781 75	
For City Debt : —			
Paving Loan due July 1st, 1894	$130,000 00		
Temporary Loan due Oct. 10, 1894 . . .	125,000 00		
		255,000 00	
Taxes : —			
Abatements	$26,926 07		
County	68,110 25		
Metropolitan Sewer . .	45,483 43		
National Bank . . .	7,372 24		
Sale Surplus	108 27		
State	62,280 00		
		210,280 26	
Water Debt : —			
Water Loan, due April 1st, 1894	$150,000 00		
Water Loan, due Nov. 1st, 1894	36,000 00		
		186,000 00	
Total expenditures			2,909,891 87
Balance in the Treasury			$388,184 70
The balance in the Treasury is subject to draft for amounts contracted for but not approved, to the amount of			388,019 32
Leaving a net balance in the Treasury of .			$165 38

CITY FUNDED DEBT.

There has been a decrease in the City Funded Debt during the year by the payment of the following loan : —

Paving Loan, issued July 1st, 1874, payable July 1st, 1894, with interest at 6 per cent. per annum . . .	$130,000 00

There has been an addition to the City Funded Debt during the year as follows : —

Building Loan, coupon bonds dated Aug. 1st, 1894, payable in twenty years, at an annual interest of four per cent.	$118,000 00
City Loan, coupon bonds dated Aug. 1st, 1894, payable in ten years, at an annual interest of four per cent.	52,000 00
Park Loan, coupon bonds dated Feb. 1st, 1894, payable in thirty years, at an annual interest of four per cent.	360,000 00
Sewer Loan, coupon bonds dated Aug. 1st, 1894, payable in thirty years, at an annual interest of four per cent.	75,000 00
Street Loan, coupon bonds dated Aug. 1st, 1894, payable in twenty years, at an annual interest of four per cent.	30,000 00
	$635,000 00

	1893.	1894.	Increase.	Decrease.
Funded City Debt .	$2,216,000 00	$2,721,000 00	$505,000 00	
Sinking Funds . .	632,815 14	628,289 05		$4,526 09
Net Funded City Debt	$1,583,184 86	$2,092,710 95	$509,526 09	

The following is a statement of the total funded debt of the city, with the rates of interest thereon: —

Bridge Loan.

Date of Issue.	Rate of Interest.	When Due.	Amount.	Total.
Oct. 1, 1887	4 per cent.—30 yrs.	Oct. 1, 1917	$10,000 00	
July 1, 1888	4 " —30 "	July 1, 1918	100,000 00	
Sept. 1, 1888	4 " —30 "	Sept. 1, 1918	100,000 00	
Mar. 1, 1889	4 " —30 "	Mar. 1, 1919	115,000 00	
Nov. 1, 1890	4 " —30 "	Nov. 1, 1920	5,000 00	
July 1, 1891	4 " —30 "	July 1, 1921	60,000 00	
July 1, 1891	4 " —10 "	July 1, 1901	15,000 00	
Aug. 1, 1893	4 " —30 "	Aug. 1, 1923	10,000 00	$415,000 00

Building Loan.

May 2, 1892	4 per cent.—10 yrs.	May 2, 1902	$20,000 00	
Nov. 1, 1893	4 " —10 "	Nov. 1, 1903	40,000 00	
Aug. 1, 1894	4 " —20 "	Aug. 1, 1914	118,000 00	$178,000 00

Cambridge Cemetery Loan.

Aug. 1, 1885	4 per cent.—20 yrs.	Aug. 1, 1905		$65,000 00

City Loan.

Aug. 1, 1894	4 per cent.—10 yrs.	Aug. 1, 1904		$52,000 00

Land Loan.

Aug. 1, 1888	4 per cent.—10 yrs.	Aug. 1, 1898		$83,000 00

Municipal Loan.

Apr. 1, 1885	4 per cent.—10 yrs.	Apr. 1, 1895		$200,000 00
Amount carried forward				$993,000 00

Amount brought forward	$993,000 00

Park Loan.

Feb. 1, 1894	4 per cent.—30 yrs.	Feb. 1, 1924		$360,000 00

Paving Loan.

July 1, 1875	6 per cent.—20 yrs.	July 1, 1895	$25,000 00	
Nov. 1, 1892	4 " —10 "	Nov. 1, 1902	50,000 00	$75,000 00

School-House Loan.

May 1, 1890	4 per cent.—10 yrs.	May 1, 1900	$100,000 00	
Jan. 1, 1891	4 " —10 "	Jan. 1, 1901	100,000 00	
July 1, 1891	4 " —10 "	July 1, 1901	60,000 00	
Nov. 1, 1892	4 " —10 "	Nov. 1, 1902	20,000 00	$280,000 00

Sewer Loan.

Oct. 1, 1875	6 per cent.—20 yrs.	Oct. 1, 1895	$20,000 00	
July 1, 1876	6 " —20 "	July 1, 1896	29,000 00	
Nov. 1, 1886	3½ " —10 "	Nov. 1, 1896	25,000 00	
July 1, 1873	6 " —30 "	July 1, 1903	136,000 00	
July 1, 1874	6 " —30 "	July 1, 1904	295,000 00	
July 1, 1875	6 " —30 "	July 1, 1905	144,000 00	
Nov. 1, 1887	4 " —20 "	Nov. 1, 1907	30,000 00	
Nov. 1, 1889	4 " —20 "	Nov. 1, 1909	22,000 00	
May 1, 1890	4 " —20 "	May 1, 1910	15,000 00	
July 1, 1891	4 " —20 "	July 1, 1911	15,000 00	
Aug. 1, 1894	4 " —30 "	Aug. 1, 1924	75,000 00	$806,000 00

Amount carried forward	$2,514,000 00

Amount brought forward	$2,514,000 00

Street Loan.

May 2, 1892	4 per cent.—10 yrs.	May 2, 1902	$55,000 00	
Aug. 1, 1894	4 " —20 "	Aug. 1, 1914	30,000 00	$85,000 00

Street Widening Loan.

Nov. 1, 1889	4 per cent.—10 yrs.	Nov. 1, 1899	$8,000 00	
July 1, 1873	6 " —30 "	July 1, 1903	10,000 00	
July 1, 1874	6 " —30 "	July 1, 1904	90,000 00	
July 1, 1875	6 " —30 "	July 1, 1905	14,000 00	$122,000 00

TOTAL FUNDED CITY DEBT	$2,721,000 00

THE FUNDED WATER DEBT.

There has been a decrease in the Funded Water Debt during the year by the payment of the following matured loans: —

Water Loan, issued April 1st, 1874, and payable April 1st, 1894, with interest at 6 per cent. per annum . .	$150,000 00
Water Loan, issued Nov. 1st, 1884, and payable Nov. 1st, 1894, with interest at four per cent. per annum .	36,000 00
	$186,000 00

There has been an addition to the Water Debt of the city during the year, caused by the issue of coupon bonds as follows: —

Water Loan, coupon bonds dated April 1st, 1894, payable in thirty years at an annual interest of four per cent. .	$300,000 00

	1893.	1894.	Increase.	Decrease.
Funded Water Debt	$1,861,500 00	$1,975,500 00	$114,000 00	
Sinking Fund of Water Works .	686,867 26	612,084 75		$74,782 51
Net Funded Water Debt	$1,174,632 74	$1,363,415 25	$188,782 51	

Following is a statement of the total funded water debt of the city, with rates of interest thereon : —

Date of Issue.	Rate of Interest.	When Due.	Amount.	Total.
Apr. 1, 1875	6 per cent.—20 yrs.	Apr. 1, 1895	$160,000 00	
July 1, 1876	6 " —20 "	July 1, 1896	103,000 00	
July 1, 1877	6 " —20 "	July 1, 1897	16,000 00	
July 1, 1878	5 " —20 "	July 1, 1898	12,500 00	
Nov. 1, 1886	3½ " —20 "	Nov. 1, 1906	43,000 00	
Oct. 1, 1887	4 " —20 "	Oct. 1, 1907	90,000 00	
Nov. 1, 1887	4 " —20 "	Nov. 1, 1907	22,000 00	
July 1, 1888	4 " —20 "	July 1, 1908	46,000 00	
Aug. 1, 1888	4 " —20 "	Aug. 1, 1908	25,000 00	
July 1, 1889	4 " —20 "	July 1, 1909	20,000 00	
May 1, 1885	4 " —25 "	May 1, 1910	288,000 00	
July 1, 1890	4 " —20 "	July 1, 1910	75,000 00	
Sept. 1, 1890	4 " —20 "	Sept. 1, 1910	125,000 00	
Jan. 1, 1891	4 " —20 "	Jan. 1, 1911	20,000 00	
Apr. 1, 1886	3½ " —25 "	Apr. 1, 1911	100,000 00	
July 1, 1886	3½ " —25 "	July 1, 1911	75,000 00	
Oct. 1, 1891	4 " —20 "	Oct. 1, 1911	35,000 00	
Jan. 1, 1892	4 " —20 "	Jan. 1, 1912	150,000 00	
May 2, 1892	4 " —20 "	May 2, 1912	75,000 00	
Nov. 1, 1892	4 " —20 "	Nov. 1, 1912	45,000 00	
Feb. 1, 1893	4 " —20 "	Feb. 1, 1913	100,000 00	
Aug. 1, 1893	4 " —20 "	Aug. 1, 1913	50,000 00	
Apr. 1, 1894	4 " —30 "	Apr. 1, 1924	300,000 00	$1,975,500 00

Recapitulation.

Amount of funded City Loan upon which interest is at 6 per cent.	$763,000 00	
Amount of funded City Loan upon which interest is at 4 per cent.	1,933,000 00	
Amount of funded City Loan upon which interest is at 3½ per cent.	25,000 00	
		$2,721,000 00
Amount of Water Loan upon which interest is at 6 per cent.	$279,000 00	
Amount of Water Loan upon which interest is at 5 per cent.	12,500 00	
Amount of Water Loan upon which interest is at 4 per cent.	1,466,000 00	
Amount of Water Loan upon which interest is at 3½ per cent.	218,000 00	
		$1,975,500 00

Temporary loans for the past ten years, and interest paid upon the same: —

Year.	Temporary Loan.	Interest paid upon the Loan.
1884	$540,000	$15,795 37
1885	300,000	13,790 52
1886	450,000	5,653 83
1887	555,000	9,222 24
1888	400,000	9,497 36
1889	490,000	5,919 54
1890	425,000	7,570 57
1891	465,000	10,796 25
1892	516,000	8,015 51
1893	541,850	11,560 32
1894	125,000	3,106 15

The Trust Funds

Assumed by the city are held by trustees, and interest is paid upon them at the rate of six per cent. annually, as follows: —

Name of Fund.	Amount.	Interest.	
Daniel White Charity Fund.....	$5,000	at 6 per cent.	$300
Dowse Institute Fund.	10,000	at 6 per cent.	600
Sanders Temperance Fund.....	10,000	at 6 per cent.	600
	$25,000		$1,500

Cemetery Fund.

Amount of Fund Nov. 30th, 1893 . . .		$28,803 53
RECEIVED.		
For perpetual care of lots in Cambridge Cemetery	$1,781 75	
Interest accumulations	1,108 86	
		2,890 61
		$31,694 14
The fund is held in trust and is invested as follows: —		
City of Cambridge Bonds	$26,000 00	
Cambridge Savings Bank	1,255 32	
Cambridgeport Savings Bank . . .	4,438 82	
Amount of Fund Nov. 30th, 1894 . . .		31,694 14

Commissioners of Sinking Funds.

Amount of Funds Nov. 30th, 1893 . . .	$632,815 14
RECEIVED.	
From City Treasurer, being amount appropriated by the City Council to be derived from taxation	100,025 00
Interest accumulations	25,448 91
	$758,289 05
EXPENDED.	
For Matured Funded City Debt	130,000 00
Amount of Funds Nov. 30th, 1894	$628,289 05

Trustees of Sinking Fund of Water Works.

Amount of Fund Nov. 30th, 1893	$686,867 26
RECEIVED.	
From City Treasurer, for amount due and appropriated by the City Council from the revenue of the Water Works.	65,152 50
Interest accumulations	26,682 45
Unexpended revenue of Water Works	19,382 54
	$798,084 75
EXPENDED.	
For matured Water Bonds	186,000 00
Amount of Fund Nov. 30th, 1894	$612,084 75

Abatements—Taxes.

No appropriation is made for abatements, as the Assessors are expected to allow in the overlay an amount sufficient to cover the same.

The overlay for 1894 was	$31,206 87
The total amount of tax abatements allowed was . . .	26,926 07
Balance available for city purposes	$4,280 80

The abatements allowed by the City Collector on certificates of the Assessors were as follows: —

	Real.	Personal.	Polls.	Total.
Tax of 1889		$11 20		$11 20
" " 1891		221 65	$8 00	229 65
" " 1892	$691 20	1,574 73	4 00	2,269 93
" " 1893	1,474 62	3,563 75	28 00	5,066 37
" " 1894	5,973 32	13,209 60	166 00	19,348 92
	$8,139 14	$18,580 93	$206 00	$26,926 07

TAXES.

The amount of taxes assessed by the Board of Assessors on the real and personal estates and polls of Cambridge, for the year 1894, was as follows: —

Valuation of real estate	$60,877,300 00
Valuation of personal estate	16,658,320 00
	$77,535,620 00
Assessed at $15.80 per $1000 gives	$1,225,062 80
22,172 polls at $2.00	44,344 00
Bank stock (non-resident separately assessed)	7,174 46
	$1,276,581 26

This tax is divided as follows: —

For City purposes*	$1,062,326 25
County assessments	68,110 25
Overlay	31,206 87
State assessments	62,280 00
State charge for non-resident bank stock	7,174 46
Metropolitan Sewer Tax	45,483 43
	$1,276,581 26

Decrease in number of polls since last year: —

317 polls at $2.00	$634 00
Increase in real estate valuation	2,095,800 00
Decrease in personal valuation	841,869 00
Gain in valuation since last year	$1,253,307 00
Number of houses in 1894	12,262
Number of houses in 1893	11,768
Number of houses built during the past year	494
Number of horses assessed	4,949
Number of cows assessed	448
Number of swine assessed	88

*To meet the city expenses the income from various departments is added to this sum raised by taxation.

Following are the usual comparative tables representing the figures included in the Assessors' warrant to the City Treasurer as of May 1, 1894, the items being a transcript from the books of the Assessors : —

Polls and Valuation of Polls and Estates, May 1, 1892.

Wards.	Polls.	Valuation of Polls.	Personal.	Real Estate.	Total, Real and Personal.	Dwellings.	Total Tax.
One.....	3,450¼	$6,900 50	$6,385,265	$14,711,700	$21,096,965	2,231	$344.451 94
Two.....	6,323½	12,647 00	4,648,730	13,574,600	18,223,330	2,988	304,220 28
Three....	3,799¾	7,599 50	2,108,800	8,531,900	10,640,700	1,594	177,850 70
Four	5,456½	10,913 00	3,007,400	11,679,100	14,686,500	2,952	245,897 00
Five.....	2,524	5,048 00	1,470,000	8,122,600	9,592,600	1,594	158,529 60
Total..	21,554	$43,108 00	$17,620,195	$56,619,900	$74,240,095	11,359	$1,230,949 52

Polls and Valuation of Polls and Estates, May 1, 1893.

Wards.	Polls.	Valuation of Polls.	Personal.	Real Estate.	Total, Real and Personal.	Dwellings.	Total Tax.
One . ..	3,691	$7,382 00	$6,512,745	$15,358,100	$21,870,845	2,333	$366,063 86
Two ...	6,667	13,334 00	4,434,720	13,975,100	18,409,820	3,089	315,255 05
Three ...	3,867	7,734 00	1,953,124	8,898,100	10,851,224	1,601	185,694 07
Four....	5,542	11,084 00	2,866,800	11,904,900	14,771,700	2,983	253,339 88
Five	2,722	5,444 00	1,732,800	8,645,300	10,378,100	1,762	175,644 84
Total ..	22,489	$44,978 00	$17,500,189	$58,781,500	$76,281,689	11,768	$1,295,997 70

Polls and Valuation of Polls and Estates, May 1, 1894.

Wards.	Polls.	Valuation of Polls.	Personal.	Real Estate.	Total, Real and Personal.	Dwellings.	Total Tax.
One	3,713	$7,426 00	$6,801,940	$16,371,000	$23,172,940	2,396	$373,558.452
Two	6,477	12,954 00	3,764,845	14,221,800	17,986,645	3,186	297,142.991
Three ...	3,738	7,476 00	1,864,135	9,026,200	10,890,335	1,606	179,543.293
Four	5,507	11,014 00	2,506,800	12,034,300	14,541,100	3,016	240,763. 38
Five ...	2,737	5,474 00	1,720,600	9,224,000	10,944,600	2,058	178,398. 68
Total..	22,172	$44,344 00	$16,658,320	$60,877,300	$77,535,620	12,262	$1,269,406,796

The valuation of estates in this city, for the years hereinbefore mentioned, are the same as originally made by the Board of Assessors, during those years, and the same figures were reported by that board to the Tax Commissioners for each of the years respectively. These valuations were subject to changes in each year, after such report was made, as shown by the following:

Net valuations of estates in the City of Cambridge for the past three years, after adding the amounts of all supplementary warrants and deducting therefrom all abatements: —

Year.	Total Valuation.	Abatements.	Net Valuation.
1892	$74,456,704	$1,777,578	$72,679,126
1893	76,327,789	1,037,776	75,290,013
1894	77,659,320	1,214,108	76,445,212
	$228,443,813	$4,029,462	$224,414,351

Borrowing Capacity.

Average net valuation for 1892, 1893, and 1894	$74,804,784

This last sum represents the amount upon which the limit of the rate of taxation, and also of municipal indebtedness is fixed under the provisions of Chapter 312 of the Acts of the year 1885.

2½ per cent. on same	$1,870,119 65
Net funded City Debt	1,381,323 49
Borrowing capacity for 1895	$488,796 16
To which may be added the exemptions allowed by the Legislature on account of the Public Parks	240,000 00
	$728,796 16

"ACTS OF 1885, CHAPTER 312.

"AN ACT TO LIMIT MUNICIPAL DEBT OF AND THE RATE OF TAXATION IN CITIES.

"Be it enacted, etc., as follows: —

"SECTION 1. The taxes assessed on property in any city, except the city of Boston, exclusive of state tax, county tax and sums required by law to be raised on account of the city debt, shall not exceed in any year twelve dollars on every one thousand dollars of the average of the assessors' valuations of the taxable property therein for the preceding three years, the valuation being first reduced by the amount of all abatements allowed thereon, previous to the thirty-first day of December in the year preceding said assessment, and any order or appropriation requiring a larger assessment than is herein limited shall be void.

"SECTION 2. The limit of indebtedness of cities shall hereafter be two and one-half per cent. on the average valuation prescribed in Section one of this act."

TAX LEVY.

Average net valuation for 1892, 1893 and 1894	$74,804,784
	12
	149609568
	74804784
Assessed at $12 per $1,000, gives	$897,657,408

Which is the legal limit of taxation for municipal purposes for 1894, outside of the Sinking Fund requirements, Interest on the Debt and State and County Tax, unless advantage is taken of the following Legislative Act of 1893: —

"ACTS OF 1893, CHAPTER 247.

"AN ACT AUTHORIZING ASSESSORS IN CITIES OF LESS THAN ONE HUNDRED THOUSAND INHABITANTS TO USE THE VALUATION OF THE YEAR PRECEDING AS A BASIS OF TAXATION.

"Be it enacted, etc., as follows: —

"SECTION 1. In every city containing less than one hundred thousand inhabitants the taxes assessed on property, exclusive of State Tax, County Tax and sums required by law to be raised on account of City Debt, shall not exceed in any year twelve dollars on every one thousand dollars of the assessors' valuation of the taxable property, therein for

the preceding year, said valuation being first reduced by the amount of all abatements allowed thereon previous to the thirty-first day of December in the year preceding said assessment, and any order or appropriation requiring a larger assessment than is herein limited shall be void; but, the city council of any city coming within the provisions of this Act, may, in any year, decide that the taxes assessed shall be raised in accordance with the provisions of section one of chapter three hundred and twelve, of the Acts of the year eighteen hundred and eighty-five."

In which case the net valuation for 1894 being	$76,445,212
	12
	152890424
	76445212
Assessed at $12 per $1,000, gives	$917,342,544
Average valuation for 1892, 1893 and 1894	897,657,408
Increase in amount which can be raised by new Act . .	$19,685,136

Statement of the valuations of the personal property and real estate of the City of Cambridge, with the number of polls, dwellings, and rate of taxation for the past ten years:—

Year.	Polls.	Personal.	Real Estate.	Total.	Dwellings.	Rate per $1,000.
1885	16,036	$12,758,255	$42,588,300	$55,346,555	9,106	$15 50
1886	16,534½	14,490,470	44,955,200	59,445,570	9,398	15 00
1887	17,139¼	13,358,910	46,344,700	59,703,610	9,761	16 00
1888	18,086¾	14,296,740	48,420,600	62,717,340	9,927	15 00
1889	18,307½	14,960,100	50,324,175	65,284,275	10,222	16 00
1890	19,221¾	15,339,925	52,235,000	67,574,925	10,615	15 60
1891	20,731¼	16,508,770	54,167,914	70,676,684	10,932	15 50
1892	22,013¼	17,687,595	56,668,100	74,355,695	11,359	16 00
1893	22,752	17,511,089	58,782,900	76,293,989	11,768	16 40
1894	22,172	16,658,320	60,877,300	77,535,620	12,262	15 80

Abatements and discounts upon taxes for the past ten years, and amount of tax uncollected December 1, 1894:—

Year.	Total Tax.	Total Abatement.	Total Discounts.	Amount of Tax uncollected Dec. 1, 1894.
1885	$895,012 06	$14,174 11	$32,781 78	
1886	930,228 50	17,497 00	32,532 57	
1887	995,964 90	15,443 74	26,054 53	
1888	982,829 50	21,667 20	25,366 53	
1889	1,088,374 60	20,982 71	28,081 09	
1890	1,099,741 38	20,966 82	28,012 44	
1891	1,143,712 67	21,343 12		$11,971 65
1892	1,240,186 50	21,636 54		15,307 60
1893	1,303,639 84	24,678 10		23,623 68
1894	1,278,899 72	26,926 07		176,215 04

Balance Sheet of the City of Cambridge, December 1, 1894, Showing Assets and Liabilities.

	Assets.	Liabilities.
Cemetery Fund	$31,694 14	
City Debt (Contingent)		$200,000 00
City of Cambridge (City Property)	3,017,200 24	
City Treasury (Cash)	388,184 70	
Daniel White Charity (Trust Fund)		5,000 00
Dowse Institute Fund (Trust Fund)		10,000 00
Funded City Debt		2,721,000 00
Funded Water Debt		1,975,500 00
Sanders Temperance Fund (Trust Fund)		10,000 00
Sinking Funds	628,289 05	
Sinking Fund of Water Works	612,084 75	
Taxes due the City	227,117 97	
Tax Liens	17,470 37	
Tax Sale "Surplus"		514 22
	$4,922,041 22	$4,922,041 22

The following table represents the unestimated revenue appropriated during the year in addition to the annual appropriations:

For Incidental Expenses . .		$8,588 58
Inspection of Wires . . .		549 71
Overseers of the Poor: —		
Almshouse	$930 65	
Farm and Ledge . . .	1,460 08	
House Offal	1,218 96	
Outside Aid	1,214 86	
		4,824 55
Park Department		963 40
Public Library		261 31
Public Property: —		
City Buildings (Care and Repairs)	1,317 45	
Engine House in Ward Three	31,000 00	
		32,317 45
Street Department: —		
Paving	5,442 14	
Watering	1,460 04	
		6,902 18
Water Works: —		
Construction	1,239 00	
Payson Park Reservoir .	2,902 20	
Hobbs Brook Reservoir .	22,323 00	
		26,464 20
		$80,871 38

After the annual appropriations had been made, the following appropriations were made and provided for transfers, unestimated revenue, and the creation of a City Debt, viz:—

For Ambulance		$625 00
Bulkhead, Main Street . .		1,000 00
Land Damages, for widening and extension of the following streets:—		
Blackstone Street . . .	$5,500 00	
Commercial Avenue . .	11,614 75	
Davenport Street . . .	3,000 00	
Fairmont Avenue . . .	700 00	
Mount Auburn Street . .	1,300 00	
Norton Street	3,099 77	
Wyeth Street	25,482 80	
		50,697 32
Land for Engine House in Ward Five	6,000 00	
Land for Latin School House	45,000 00	
Land for School House in Ward Three	7,000 00	
New Engine House in Ward Two	19,000 00	
New Engine House in Ward Three	31,000 00	
New School House in Ward Two	2,000 00	
New School House in Ward Five	29,256 80	
		139,256 80
Paving Western Avenue .		10,390 00
Rebuilding Mount Auburn Street		35,200 00
Resurfacing Brattle and Craigie Streets		13,000 00
Water Works, Fresh Pond Land		7,000 00
		$257,169 12

Transfers.

The following transfers were made from the appropriations mentioned, to make up deficiencies occurring in the appropriations to which transfers were made, viz.: —

From the Appropriation for	Amounts.	To the Appropriation for	Amounts.
Incidental Expenses...	$2,497 53	City Clerk's Department..	$29 55
		Election Expenses, City Clerk.....	400 72
		Health Department.....	700 00
		Inspection of Milk and Vinegar.....	50 00
		Lamp Department	1,000 00
		School Dept., Incidentals .	178 13
		Stationery and Printing...	139 13
Interest.....	10,000 00	Incidental Expenses.....	1,000 00
		Overseers of the Poor.....	5,000 00
		School Dept., Salaries	4,000 00
House Offal Dept.....	1,000 00	Almshouse Department...	1,000 00
Public Property: —		Public Property:—	
(Sanitary Arrangements)	2,080 41	City Buildings, Care and Repair.....	550 00
		Election Expenses.....	306 92
		Incidentals.....	87 22
		School Houses, Care and Repairs.....	1,136 27
Sewers, Construction..	5,000 00	Sewers, Maintenance.....	5,000 00
Street Department: —		Street Department:—	
Cleaning.....	4,425 00	Bridges.....	300 00
		Paving Western Avenue	3,625 00
		Shade Trees and Public Grounds	500 00
Collection of Ashes .	650 00	Bridges	150 00
		Shade Trees and Public Grounds.....	500 00
Maintenance.....	5,695 00	Paving Western Avenue	5,695 00
Paving	1,070 00	Paving Western Avenue	1,070 00
Water Works: —		Water Works:—	
Construction Payson Park Reservoir.....	94,700 00	Construction.....	5,000 00
		Construction Fresh Pond Land.....	20,000 00
		Construction Fresh Pond Reservoir.....	19,700 00
		Construction Hobbs Brook Reservoir.....	50,000 00
	$127,117 94		$127,117 94

APPROPRIATIONS AND EXPENDITURES.

The Amount of the Several Appropriations made by the City Council during the Year — The Transfers from One Appropriation to Another — The Expenditures in Detail under each Appropriation, and the Unexpended Balances, Nov. 30, 1894.

Ambulance.

Appropriation			$625 00
EXPENDED.			
For Ambulance and Harness: —			
Chas. Waugh & Co.		$625 00	
Total			$625 00

Assessor's Department.

Appropriation			11,000 00
EXPENDED.			
For Salaries of Assessors: —			
Joshua G. Gooch	$1,600 00		
Andrew J. Green	1,600 00		
Joseph Whittemore	666 67		
Sam'l L. Montague	898 92		
Assistant Assessors: —			
John M. Davis	361 13		
D. J. Hayes	264 00		
Warren Ivers	268 00		
Geo. D. Wellington	324 00		
D. B. Shaughnessy	200 00		
Clerks: —			
Lizzie E. Estes	364 50		
Ida G. Wellington	720 00		
Carrie A. Estes	120 00		
Helen P. Hooker	120 00		
Temporary Clerks	2,036 41		
		$9,543 63	
Advertising, James Cox		16 59	
Abstracts, Byron Boyd		26 00	
Atlas, G. W. Bromley & Co.		25 00	
Car Tickets, W. E. St. Railway Co.		30 00	
Carriage Hire: —			
M. J. Fairbanks	6 00		
Whiting & Smith	17 00		
		23 00	
Directories: —			
Edgar F. Hunt & Co.	3 00		
Sampson, Murdock & Co.	5 00		
		8 00	
Amounts carried forward		$9,672 22	$11,000 00

Amounts brought forward .		$9,672 22	$11,000 00
For Examining Titles, Kern & McLoud		15 00	
Expressage, Savage & Son .		27	
Stationery and Printing: —			
Cotton & Gould	$224 25		
Jas. H. Cox	21 65		
Harvard Printing Co . .	849 00		
Henry M. Meek	12 08		
Stationery Department .	95 18		
		1,202 16	
Subscription, *Banker and Tradesman*		5 00	
Services on Abstracts: —			
Lillian A. Balch		25 00	
Total			$10,919 65
Balance unexpended . .			$80 35

SUMMARY OF EXPENDITURES.

Salaries of Assessors . . .	$4,765 59
Services of Assistant Assessors	1,417 13
Clerical Assistance	3,385 91
Abstracts	26 00
Advertising	16 59
Atlas	25 00
Carriage Hire and Car Tickets	53 00
Directories	8 00
Examination of Titles . .	15 00
Expressage	27
Stationery and Printing . .	1,207 16
Total	$10,919 65

Auditing Department.

Appropriation			$4,000 00

EXPENDED.

For Salaries: —			
Auditor, Harry T. Upham .	$2,100 00		
Clerk, Esther L. Cogan . .	752 50		
Temporary Clerks	149 53		
		$3,002 03	
Amounts carried forward .		$3,002 03	$4,000 00

Amounts brought forward .		$3,002 03	$4,000 00
For Advertising, Jas. Cox . .		67	
Car Tickets, W. E. St. Railway Co.		10 00	
Dictionary, Houghton, Mifflin & Co.		8 50	
Directories, E. F. Hunt & Co.		3 00	
Metallic Vault Fittings:—			
Fenton Metallic Co. . .	$600 00		
Labor	5 00		
	———	605 00	
Numbering Machine, H. N. Cotton		9 00	
Sharpening Erasers, Geo. W. Buzzell		1 50	
Stamps and Repairs:—			
L. W. Poole	6 50		
T. S. Buck	5 00		
	——	11 50	
Stationery and Printing: —			
James H. Cox	112 50		
Cotton & Gould	36 09		
Harvard Printing Co. . .	34 50		
E. W. S. Jones	22 00		
Geo. H. Richter & Co. .	2 00		
Stationery Department .	58 38		
John Wilson & Son . . .	65 00		
	———	330 47	
Subscription, Jas. Cox . .		2 00	
		———	
Total			$3,983 67
Balance unexpended . .			$16 33

SUMMARY OF EXPENDITURES.

Salary of City Auditor . . .	$2,100 00
Clerical Assistance	902 03
Metallic Vault Fittings . .	605 00
Stationery, Printing and Supplies	376 64
	$3,983 67

Bridge Department.

Appropriation			$12,800 00
RECEIVED.			
For Rent, wharfage, etc. . .		$597 81	
EXPENDED.			
For Salaries: —			
Bridge Commissioner and Harbor Master, Wm. J. Marvin	$800 00		
Clerk, Chas. S. Parsons . .	250 00		
Motormen	799 96		
Draw-tenders and Assistants	3,040 00		
		4,889 96	
Advertising		11 99	
Carpentry, Josiah Shaw . .		1,101 38	
Cash for sundries: —			
M. F. Corkery	191 51		
A. W. Smith	97 31		
N. E. Story	40 59		
Jas. A. Gorman	9 11		
Chas. S. Parsons	67 50		
		406 02	
Couch, Jas. A. Mador . .		6 00	
Current for Harvard Bridge Draw: —			
Cambridge Electric Light Co.		150 00	
Directories, Sampson, Murdock & Co.		4 00	
Doors, Windows, and Blinds: —			
A. W. Hastings & Co. . .	6 58		
E. A. Carlisle, Pope & Co.	2 47		
		9 05	
Fuel, Geo. M. Winslow & Co.		229 12	
Furniture, Phillips Bros. & Co.		10 25	
Furnace work, S. C. Higgins		8 59	
Globes: —			
Nathaniel Tufts	12 13		
Union Glass Co.	7 19		
		19 32	
Amounts carried forward .		$$6,845 68	$12,800 00

Amounts brought forward .		$6,845 68	$12,800 00
For Ice: —			
Boston Ice Co.	$9 10		
Drivers Union Ice Co. . .	7 20		
		16 30	
Iron Work: —			
Miller & Shaw	249 37		
L. M. Ham & Co. . . .	28 97		
		278 34	
Labor: —			
P. J. Corkery	5 00		
John Kelley	3 00		
John Quinn	6 00		
Michael Smith	28 00		
		42 00	
Labor and Materials, City of Boston, Water Works . .		6 90	
Ladder, F. D. Weld . . .		1 25	
Lights: —			
Boston Electric Light Co.	654 69		
Cambridge Electric Light Co.	1,345 03		
		1,999 72	
Lumber: —			
John S. Clary	321 49		
Geo. W. Gale, Lumber Co.	1,270 26		
G. H. Jennings, Jr. . . .	309 83		
George McQuesten & Co. .	118 19		
E. D. Sawyer & Co. . .	42 51		
Wm. H. Wood & Co. . .	4 53		
		2,066 81	
Oil, paints: —			
Gould & Cutler	7 73		
Leonard & Ellis	131 52		
Merrill, Dexter & Co. . .	2 57		
Standard Oil Co.	1 80		
Victor Oil Co.	1 00		
		144 62	
Pile Work, Nay & Ellis . .		25 00	
Plumbing, Frank A. Titus .		5 25	
Paving, Austin Ford & Son .		45 62	
Amounts carried forward .		$11,477 49	$12,800 00

Amounts brought forward,		$11,477 49	$12,800 00
For Repairs: —			
City of Boston	$15 0		
John J. Blevins	18 31		
		33 32	
Rubber Goods, Boston Belting Co.		8 59	
Salt: —			
C. L. Davenport	7 62		
M. B. & J. H. Murphy. .	1 00		
		8 62	
Sand: —			
John J. Brassil		5 00	
Stationery and Printing: —			
City of Boston	16 08		
J. L. Fairbanks & Co. . .	4 42		
Rockwell & Churchill . .	17 07		
Stationery Dept.	7 15		
		44 72	
Sprinkling Streets: —			
Cambridge Street Dept. .	23 00		
Proctor Bros. & Billings .	125 00		
		148 00	
Teaming: —			
Chas. McMahon	50 13		
Chas. Linehan	147 37		
John Quinn	17 20		
		214 70	
Tools, hardware, and supplies: —			
Burditt & Bynner . . .	4 37		
Geo. W. Darling . . .	7 72		
Dodge, Haley & Co. . .	80 03		
Thos. J. Emery	4 85		
J. M. Price & Son . . .	40 21		
Whittier Hardware Co. .	5 57		
		142 75	
Typewriting, F. T. Groll. .		5 00	
Water Rates, City of Boston		32 50	
Total			12,120 69
Balance unexpended . .			$679 31

SUMMARY OF EXPENDITURES.

Salary of Bridge Commissioner and Harbor Master	$800 00
Clerk	250 00
Services of Draw-tenders, Motormen, etc.	4,220 48
Car Fares and Messengers	67 50
Current for Drawbridge	150 00
Fuel	229 12
Lighting	1,999 72
Lumber	2,066 81
Oil, paint, etc.	144 62
Repairs	1,504 40
Sprinkling Bridge	148 00
Stationery and Printing	44 72
Teaming	214 70
Tools, hardware and supplies	243 12
Typewriting	5 00
Water rates	32 50
	$12,120 69

Cemetery Department.

Appropriation $18,000 00

RECEIVED.

For Burials	$4,528 00
Care of Lots	3,659 92
Foundations	1,364 24
Grading and Sodding	322 00
Myrtle Graves	42 00
Interest on Cemetery Fund	1,128 05
Rent	200 00
Repairs	21 23
Sales	6,675 13
Slate Graves	151 00
Sundries	239 48
Total	$18,331 05

EXPENDED.

For Salaries of		
Supt., Chas. S. Childs	$1,300 00	
Asst. Supt., Henry C. Hobbs	821 25	
Amounts carried forward	$2,121 25	$18,000 00

Amounts brought forward .	$2,121 25		$18,000 00
For Book-keeper, J. Watson Taylor	1,066 00		
Clerk, Edward J. Brandon .	100 00		
Laborers	10,252 88		
		$13,540 13	
Advertising		3 20	
Brooms, Stephen Adams .		5 00	
Carpentry: —			
M. C. Beedle	6 50		
J. Q. A. Cate	94 79		
		101 29	
Car tickets, W. E. St. Railway Co.		20 00	
Care of Snow and Ice, Street Department		35 00	
Carriage hire: —			
J. Callahan	5 00		
J. E. Fabyan	9 00		
Jos. Le Farve	14 00		
Lake & Moynahan . . .	16 00		
R. E. O'Brien	4 00		
Daniel P. Shea	18 50		
		66 50	
Directory, W. A. Greenough & Co.		3 00	
Expressage: —			
American Express Co. . .	2 10		
Hatch & Co.	4 70		
		6 80	
Fuel, L. G. Burnham & Co.		42 20	
Granite Posts, Wight & Scorgie		238 00	
Hay and grain, Jos. Hall .		128 27	
Harness and repairs, J. F. Nolan		21 57	
Horse shoeing, Wm. Balmer		38 50	
Iron fence, Belmont Iron Works		1,433 00	
Inspection, R. W. Hildreth & Co.		12 78	
Amounts carried forward .		$15,695 24	$18,000 00

Amounts brought forward .		$15,695 24	$18,000 00
For Labor and Materials: —			
Jas. Grant	$25 00		
Water Works	75 30		
	——	100 30	
Lumber and cement: —			
Geo. W. Gale Lumber Co.	$9 41		
N. N. Stickney	86 24		
	———	95 65	
Marble tablets, grave boxes, etc.: —			
Wm. L. Lockhart . . .	8 25		
H. H. Mathews	289 10		
Alex. McDonald & Son. .	177 00		
	———	474 35	
Manure, Joseph Finnick . .		163 50	
Painting: —			
Eben Tucker	75		
James Morse	12 04		
	———	12 79	
Paving blocks, Street Dept. .		275 87	
Plants, trees, and grass seed:			
Joseph Breck & Sons . .	4 65		
Richard Gallivan	71 62		
P. O'Brien & Son . . .	6 00		
Shady Hill Nurseries . .	44 10		
	———	126 37	
Repairing iron fence, P. J. Dinn		22 96	
Repairing roof, John J. Blevins		33 05	
Repairing carriage, Chapman Carriage Co.		35 29	
Stationery, printing and postage: —			
Amee Bros.	18 60		
Chas. S. Childs	32 00		
Cotton & Gould	52 80		
J. Frank Facey	41 75		
Poole Printing Co. . . .	2 00		
	———	147 15	
Stone, John Doody . . .		185 71	
Stone work, John McNamee's Sons		13 60	
Amounts carried forward .		$17,381 83	$18,000 00

Amounts brought forward .		$17,381 83	$18,000 00
For Telephone rents and tolls,			
N. E. Telephone Co. . .		90 60	
Teaming, John Doody . .		108 50	
Tools and repairs: hardware and supplies: —			
Burditt & Bynner . . .	$201 91		
Chapman Carriage Co. . .	24 21		
Moore & Ricker	4 18		
C. W. Lerned & Co. . .	4 00		
Morss & Whyte	7 50		
D. J. Wild & Co. . . .	79 55		
Geo. A. Wood	7 61		
		328 96	
Weighing coal, H. W. Brooks		50	
Watering streets, Cambridge Street Department . . .		88 50	
Total			$17,998 89
Balance unexpended .			$1 11

SUMMARY OF EXPENDITURES.

Salaries	$3,287 25
Labor	10,274 62
Carriage hire and car tickets .	86 50
Fuel	42 70
Hardware tools	241 68
Lumber, lime and cement .	95 65
Manure	163 50
New iron fence	1,534 48
New shed	51 83
Paving	275 87
Repairs	171 05
Shrubs, plants, etc. . . .	128 72
Slate graves and boxes . .	297 35
Soldiers headstones . . .	177 00
Sprinkling roadways . . .	88 50
Stable	190 15
Stationery, printing, etc. . .	144 62
Stone, posts, etc.	497 81
Telephone, rent and tolls .	90 60
Ward 1 burying ground . .	83 71
Water Supply	75 30
	$17,998 89

City Clerk Department.

Appropriation			$6,200 00
Transferred from Incidental Expenses . . .			29 55
			$6,229 55
RECEIVED.			
Fees from sundry persons		$2,282 35	
EXPENDED.			
For Salaries : —			
City Clerk, W. W. Pike . .	$3,000 00		
Asst. City Clerk, E. J. Brandon	1,400 00		
		4,400 00	
Clerical Assistance : —			
Anne Jacobs	215 90		
Sarah S. Jacobs	338 10		
Amanda Richardson . .	264 00		
Grace C. Waymouth . .	24 00		
		842 00	
Atlas, G. W. Bromley & Co.		15 00	
Badges, A. W. Mitchell Mfg. Co.		30 00	
Binding, J. H. H. McNamee		2 90	
Boxes, Chas. E. Pierce & Co.		6 25	
Bulletin of Legislature, W. W. Pike		24 00	
Canvassing for births: —			
John M. Davis	60 00		
Mellen F. Ellis	45 00		
Warren Ivers	51 00		
James E. Lennon . . .	72 00		
John Loughrey	63 00		
		291 00	
Directory, E. F. Hunt & Co.		3 00	
Expressage: —			
American Express Co. .	1 95		
Savage & Son	30		
		2 25	
Furniture, Phillips Bros. & Co.		16 75	
Newspapers, F. L. Beunke .		6 00	
Amounts carried forward .		$5,639 15	$6,229 55

Amounts brought forward .		$5,639 15	$6,229 55
For Posting and serving notices: —			
John M. Davis	$122 25		
J. A. McLane	6 00		
		128 25	
Reporting births		222 25	
Stamps, J. J. Jones . . .		5 95	
Stationery and printing: —			
Cambridge Chronicle Co. .	50 00		
Cotton & Gould	42 50		
Jas. H. Cox	39 25		
Harvard Printing Co. . .	30 00		
E. W. S. Jones	15 50		
Stationery Department .	50 45		
		227 70	
Subscription, James Cox . .		2 00	
Typewriting		4 25	
Total			6,229 55

SUMMARY OF EXPENDITURES.

Salaries	$4,400 00
Clerical Assistance	842 00
Atlas	15 00
Badges	30 00
Bulletin of Legislature . .	24 00
Canvassing births	291 00
Reporting births	222 25
Posting and serving notices .	128 25
Stationery and printing . .	229 70
Sundries	47 35
	$6,229 55

City Messenger Department.

Appropriation			$2,800 00
EXPENDED.			
For Salaries: —			
City Messenger, F. L. Pratt .	$1,800 00		
Assistant to City Messenger, Chas. M. Jones	313 00		
		$2,113 00	
Amounts carried forward .		$2,113 00	$2,800 00

Amounts brought forward .		$2,113 00	$2,800 00
For Carriage hire: —			
F. D. Bartlett	$5 00		
Whiting & Smith . . .	2 00		
	——	7 00	
Car tickets, W. E. St. Railway Co.		40 00	
Directories: —			
E. F. Hunt & Co. . . .	3 00		
W. A. Greenough & Co. .	2 00		
Sampson, Murdock & Co. .	5 00		
	——	10 00	
Expressage: —			
Butland & Son	25		
Hatch & Co.	48 35		
Savage & Son	1 65		
	——	50 25	
Rent of P. O. Box, J. W. Coveney		10 00	
Stationery and printing: —			
F. L. Beunke	2 75		
Harvard Printing Co. . .	9 00		
F. L. Pratt	1 00		
Stationery Department .	155 74		
	———	168 49	
Subscription, James Cox . .		2 00	
Telephone rent & tolls, N. E. Telephone Co.		186 80	
Total			2,587 54
Balance unexpended . .			$212 46

Civil Service Department.

Appropriation			$225 00
EXPENDED.			
For Salary of Clerk, Harry L. Lincoln . .		$200 00	
Stationery & Postage, Cotton & Gould		24 50	
Total			224 50
Balance unexpended . .			50

Clerk of Committees' Department.

Appropriation			$3,600 00
EXPENDED.			
For Salaries of			
Clerk of Committees, John McDuffie	$2,400 00		
Assistant to Clerk of Committees, Eben W. Pike . . .	939 00		
		$3,339 00	
Atlas, G. W. Bromley & Co.		25 00	
Binding, Thorp & Martin Co.		1 75	
Car tickets, W. E. St. Railway Co.		10 00	
Directories: —			
E. F. Hunt & Co. . . .	3 00		
Sampson, Murdock & Co. .	10 00		
		13 00	
Eyelet Press, C. H. Hurlburt		3 50	
Reporting Hearings, Elizabeth A. McGinnis		45 00	
Stamps: —			
T. S. Buck	3 57		
J. J. Jones	2 75		
		6 32	
Stationery and printing: —			
Cotton & Gould	10 50		
James H. Cox	18 50		
Crocker & Scott	3 00		
Francis Doane & Co. . .	4 25		
Harvard Printing Co. . .	6 50		
Jennings & Welch . . .	7 50		
Geo. H. Richter & Co. .	10 27		
Stationery Department .	78 88		
		139 40	
Subscription, James Cox . .		2 00	
Typewriter repairs, Geo. H. Richter & Co.		12 40	
Total			3,597 37
Balance unexpended . .			$2 63

Election Expenses — City Clerk.

Appropriation			$4,500 00
Transferred from Incidental expenses			400 72
			$4,900 72

EXPENDED.

For Precinct Officers		$3,010 50	
Police "		280 00	
Bell Ringers		11 00	
Clerical Assistance: —			
Margaret A. Dayton	$3 90		
S. S. & A. Jacobs	30 00		
Amanda Richardson	42 00		
		75 90	
Clerks at Recount: —			
Geo. M. Clukas	13 20		
E. A. Counihan	13 20		
Jas. H. Cox	8 10		
Chas. M. Jones	13 20		
Harry L. Lincoln	13 20		
John Loughrey	13 20		
O. L. Perkins	13 20		
Eben W. Pike	9 60		
Frank E. Shaw	13 20		
John R. Wilson	9 90		
		120 00	
Advertising: —			
Cambridge Chronicle Co.	49 00		
Jas. Cox	30 08		
F. S. Hill	46 75		
Sacred Heart Review	32 00		
		157 83	
Barge hire: —			
John Nixon	24 00		
W. E. St. Railway Co.	15 00		
		39 00	
Binding and folding ballots,			
J. H. H. McNamee		74 44	
Carriage hire: —			
M. J. Fairbanks	10 00		
Whiting & Smith	11 00		
A. Nixon	18 00		
		39 00	
Amounts carried forward		$3,807 67	$4,900 72

Amounts brought forward .		$3,807 67	$4,900 72
For Car tickets, W. E. St. Railway Co.		5 00	
Carpentry, W. H. Norris . .		6 36	
Expressage: —			
P. Biggin	$12 75		
J. R. & C. S. Hersum . .	4 00		
		16 75	
Hardware and supplies: —			
Burditt & Bynner . . .	7 55		
F. A. White	2 20		
		9 75	
Labor, T. J. Denton . . .		37 00	
Paste, J. H. & J. P. Thayer & Co.		1 40	
Posting & serving, John M. Davis		59 60	
Refreshments, M. R. Jones		92 00	
Repairs on ballot boxes: —			
E. Hubbard Barlow . .	10 50		
Edmund Hoxie	8 85		
		19 35	
Stationery and printing: —			
Cambridge Chronicle Co.	10 75		
Cotton & Gould	49 15		
Jas. H. Cox	92 00		
Harvard Printing Co. . .	631 00		
Stationery Department .	62 94		
		845 84	
Total			4,900 72

Election Expenses — Registrars of Voters.

Appropriation			$3,800 00
EXPENDED.			
For Salaries of Registrars of Voters and Clerk: —			
Isaac Bradford	$500 00		
Wm. J. Breen	500 00		
James Cox	500 00		
Frank H. Teele (Clerk) .	600 00		
		$2,100 00	
Amounts carried forward .		$2,100 00	$3,800 00

Amounts brought forward .		$2,100 00	$3,800 00
For Clerical Assistance: —			
Anne Jacobs	$126 00		
Jessie I. R. Waterman . .	82 19		
		208 19	
Advertising: —			
Cambridge Chronicle Co. .	9 00		
James Cox	16 50		
F. S. Hill	19 50		
		45 00	
Books, E W. S. Jones . .		8 40	
Binding: —			
E. W. Bettinson	72 00		
J. H. H. McNamee . . .	9 80		
		81 80	
Carpentry, W. H. Norris . .		62 00	
Directory, Edgar F. Hunt .		3 00	
Posting, John M. Davis . .		63 00	
Stamp, L. W. Poole . . .		4 50	
Stationery and printing: —			
James H. Cox	7 75		
E. W. S. Jones	14 75		
Stationery Department .	8 21		
John Wilson & Son . . .	978 26		
		1,008 97	
Total			3,584 86
Balance unexpended . .			$215 14

Election Expenses — Superintendent of Buildings.

Appropriation	$900 00
Transferred from Public Property, Sanitary arrangements.	306 92
	$1,206 92

EXPENDED.

For Carpentry, W. H. Norris .		$547 24	
Expressage: —			
J. R. & C. S. Hersum . .	$7 00		
J. E. Ricker	11 00		
		18 00	
Gas, Cambridge Gas Light Co.		2 08	
Heating Apparatus, S. C. Higgins		16 85	
Amounts carried forward .		$584 17	$1,206 92

Amounts brought forward .		$584 17	$1,206 92
For Paste, J. H. & J. P. Thayer & Co.		1 05	
Preparing rooms for voting .		306 15	
Rent: —			
Cambridge Lyceum . . .	35 00		
Chas. Beck, Post 56, G.A.R.	50 00		
Citizens' Trade Association	105 00		
E. L. Green	30 00		
Odd Fellows' Hall Association	20 00		
T. H. Raymond	7 00		
St. John's Literary Institute	40 00		
Co. B, First Regiment . .	15 00		
		302 00	
Sawdust: —			
Carlos L. Page & Co. . .	2 00		
Geo. G. Page Box Co. . .	2 55		
		4 55	
Use of Lamps, Geo. F. Dickson		9 00	
Total			1,206 92

Engineering Department.

Appropriation			$15,000 00
RECEIVED.			
For Services to Park Department,		$1,217 08	
Services to Water Works .		3,258 11	
		$4,475 19	
EXPENDED.			
For Salaries of			
Engineer, L. M. Hastings .	$3,000 00		
Assistants	9,812 22		
Clerk, Mary E. Rowen .	313 00		
Temporary Clerk, Nellie Holbrook	48 00		
		13,173 22	
Amounts carried forward		$13,173 22	$15,000 00

Amounts brought forward .		$13,173 22	$15,000 00
For Atlas, G. W. Bromley & Co.		15 00	
Books, T. H. Castor & Co.		4 00	
Carriage hire, M. J. Fairbanks		6 00	
Car tickets, W. E. St. Railway Co.		250 00	
Cash expended, L. M. Hastings		8 92	
Carpentry:			
Ira G. Hersey	$8 82		
W. H. Norris	3 82		
		12 64	
Directory, Sampson, Murdock & Co.		5 00	
Eyelet press, C. G. Hurlburt,		3 50	
Expressage		8 50	
Hardware, tools, repairs, and supplies:			
Buff & Berger	12 50		
Burditt & Bynner . . .	4 00		
Cambridge Chronicle Co. .	1 00		
Greene & Co.	1 50		
Oscar F. Hill	1 00		
Chas. C. Hutchinson . .	8 00		
D. W. Hyde & Co. . . .	25		
James Maitland	12 00		
Miller & Shaw	5 88		
James E. Moody . . .	4 00		
F. A. White	47 67		
		97 80	
Furniture, Phillips, Bros. & Co.		12 00	
Glass, Boston Plate and Window Glass Co. . . .		2 98	
Maps, D. W. Butterfield . .		6 00	
Mounting Maps: —			
H. A. Scranton		30 75	
W. W. White & Co. . .		147 91	
Photos, D. W. Butterfield .		342 50	
Stamp, H. C. Dimond & Co.		4 59	
Amounts carried forward .		$14,131 31	$15,000 00

Amounts brought forward .		$14,131 31	$15,000 00
For Stationery, printing, and drawing materials : —			
Boston Engraving Co. . .	$35 00		
Cambridge Chronicle Co. .	4 50		
Cotton & Gould	95 35		
Crocker & Scott	2 25		
S. H. Esbjorn	47 95		
Frost & Adams	96 19		
Harvard Printing Co. . . .	8 42		
H. E. Lombard	7 00		
Herbert B. Sanger	75		
Stationery Department . . .	48 21		
		345 62	
Telephone rent and tolls : —			
N. E. Telephone Co. . . .		22 60	
Total			14,499 53
Balance unexpended . . .			$500 47

Bulkhead, Main Street.

Appropriation			$1,000 00
EXPENDED.			
For Advertising, Boston Herald Co.		5 00	
Contract, Trumbull & Ryan .		738 97	
Exam. Title, Kern & McLoud		36 00	
Total			$779 97
Balance unexpended			220 03

Executive Department.

Appropriation			$4,900 00
EXPENDED.			
For Salaries of			
Mayor, Wm. A. Bancroft .	$3,500 00		
Clerk, Edw. A. Counihan .	1,000 00		
		$4,500 00	
Cash expended, Wm. A. Bancroft		6 00	
Car tickets, W. E. St. Railway Co.		40 00	
Amounts carried forward .		$4,546 00	$4,900 00

Amounts brought forward .		$4,546 00	$4,900 00
For Carriage hire: —			
M. J. Fairbanks	$5 00		
J. E. Fabyan	2 00		
Lake & Moynahan . . .	23 75		
Whiting & Smith . . .	35 00		
		65 75	
Directory, E. F. Hunt & Co.		3 00	
Dinners, Colonial Club . .		6 00	
Stationery and printing: —			
Cotton & Gould	47 22		
Crocker & Scott	8 00		
James H. Cox	12 00		
Harvard Printing Co. . .	45 95		
J. Hildreth & Co. . . .	1 00		
John A. Lowell & Co. . .	24 84		
Stationery Department .	48 97		
		187 98	
Sundries		10 30	
Typewriter repairs, Smith Premier Typewriter Co. .		6 05	
Total			4,825 08
Balance unexpended . .			$74 92

Fire Department.

Appropriation			$73,000 00
RECEIVED.			
For Board of Horse		$117 00	
Old Furniture		18 65	
Old Horse		50 00	
		$185 65	
EXPENDED.			
For Salaries of			
Chief, T. J. Casey	$1,600 00		
Acting Chief, C. W. Brackett	47 00		
District Chiefs: —			
N. W. Bunker	375 00		
C. W. Brackett	375 00		
W. B. Cade	375 00		
Amounts carried forward	$2,772 00		$73,000 00

Amounts brought forward .	$2,772 00		$73,000 00
For Permanent men as per pay rolls	36,481 92		
Call men as per pay rolls . .	14,349 10		
Substitutes: —			
Geo. W. Butler	8 75		
John H. Dardis	5 00		
J. P. Parsons	7 50		
		$53,624 27	
Atlas, G. W. Bromley & Co.		15 00	
Apparatus, New: —			
La France Fire Engine Co., (Ext. Hayes Aerial Truck)		3,100 00	
The Fire Extinguisher Mfg. Co., Babcock Chemical Engine . .		1,750 00	
Chas. Waugh & Co., Wagon		295 00	
Apparatus and repairs: —			
Wm. Campbell & Co. . .	216 42		
Chapman Carriage Co. .	1 00		
C. J. Clapp	11 75		
D. W. Gage	2 95		
S. F. Haywood & Co. . .	46 00		
F. Ivers & Son	38 15		
A. J. Jones	38 50		
A. S. Jackson	3 50		
T. H. Kneeland	21 75		
John Lane	12 15		
James Maitland	6 00		
Manchester Loco. Works .	106 95		
Geo. McIntosh	63 18		
Miller & Shaw	31 39		
Mogul Mfg. Co.	16 50		
C. W. H. Moulton & Co. .	81 10		
Chas. Waugh & Co. . .	193 75		
		891 04	
Brooms, C. W. Carman . .		15 00	
Badges, H. M. Richards & Co.		12 00	
Amounts carried forward .		$59,702 31	$73,000 00

Amounts brought forward .		$59,702 31	$73,000 00
For Carpentry, D. McDonald .		11 14	
Care of Fire; Lexington Ave. Engine House, Geo. W. Butler		39 00	
Copper waste, Edw. H. Haskell		30 00	
Cleaning, James P. Carey .		12 00	
Candles, F. Maguire & Co. .		9 00	
Carriage hire: —			
J. E. Fabyan	$10 00		
M. J. Shea	10 00		
		20 00	
Clocks and repairs: —			
A. J. Applegate	4 25		
Jas. A. Rice	13 00		
		17 25	
Devices, A. W. Mitchell Mfg. Co.		19 25	
Directory, E. F. Hunt & Co.		3 00	
Expressage and moving furniture: —			
American Express Co. . .	90		
Boyle's Expressage . . .	6 25		
Hatch & Co.	7 95		
Savage & Son	13 95		
Jas. H. Skehan	4 00		
		33 05	
Fuel: —			
Baker, Hunnewell Co. . .	197 25		
L. G. Burnham & Co. . .	1,161 00		
Coleman Bros.	180 26		
J. A. Heaton	39 50		
Richardson & Bacon . .	29 00		
Wellington & Buck . . .	112 60		
		1,719 61	
Weighing, H. W. Brooks .		8,00	
Furniture and furnishings: —			
Wm. Caldwell	1 50		
D. W. Hyde	95 57		
Adolph Pauly	250 00		
W. W. Pratt	210 50		
Worcester Bros.	555 40		
		1,112 97	
Amounts carried forward .		$62,736 58	$73,000 00

Amounts brought forward .		$62,736 58	$73,000 00
For Gas fittings, N. A. T. Jones		6 00	
Hardware, tools, and supplies: —			
C. L. Bradlee	$1 70		
Brock Bros.	16 88		
Burditt & Bynner . . .	145 82		
C. W. Carmen	34 03		
R. Freedman	11 20		
J. M. Price & Son . . .	21 97		
F. A. White	57 00		
		288 60	
Harness and repairs: —			
Chas. E. Berry	271 25		
M. Cavanagh	17 75		
Owen Doherty	327 45		
John Hancock	67 35		
Wm. Mitchell	42 87		
G. A. Morse	9 93		
Sundry persons	3 75		
		740 35	
Hay, grain, and straw: —			
J. S. Bradeen	122 95		
E. R. Luke & Co. . . .	1,313 50		
McPherson Bros. . . .	1,960 16		
Geo. G. Wright	51 98		
		3,448 59	
Horses, P. H. Dardis . . .		1,385 00	
Horse Medicine, W. G. Claflin		16 58	
Horse shoeing: —			
Wm. Balmer	50 25		
Wm. Bell	66 00		
Jas. Bolger	82 25		
T. Burke	77 27		
P. J. Callahan	74 65		
Donahue Bros.	6 00		
E. E. Donahue	56 51		
Garrett & Lowd	56 50		
W. Garrett	14 00		
J. F. Gurry	98 37		
Thos. Smith	76 00		
		657 80	
Amounts carried forward .		$69,279 50	$73,000 00

Amounts brought forward .		$69,279 50	$73,000 00
For Hose, etc., Boston Woven Hose Co.		780 77	
Ice: —			
Cambridge Ice Co. . . .	18 30		
Fresh Pond Ice Co. . .	25 68		
Independent Ice Co. . .	4 50		
	———	48 48	
Lighting: —			
Camb. Electric Light Co. .	166 78		
Camb. Gas Light Co. . .	710 97		
	———	877 75	
Moving bell, H. Ryder . .		35 00	
Oil: —			
Lustralis Mfg. Co. . . .	48 00		
Standard Oil Co.	46 03		
	———	94 03	
Refreshments: —			
H. E. Dupee	10 50		
M. R. Jones	8 00		
	———	18 50	
Sponge, W. G. Hallock . .		39 20	
Soap, Frank H. Teele . .		15 75	
Stationery and printing: —			
Jas. H. Cox	12 25		
Harvard Printing Co. . .	11 70		
Stationery Department .	4 80		
	———	28 75	
Supplies: —			
T. H. Brewer	5 35		
J. A. Holmes & Co. . .	13 00		
H. N. Hovey & Co. . .	6 38		
M. R. Jouett & Co. . . .	8 25		
C. W. H. Moulton & Co. .	7 50		
Geo. G. Page Box Co. . .	1 50		
Ryder & Davis	4 66		
Geo. A. Wood	3 57		
	———	50 21	
Use of horses and men: —			
John J. Brassil	107 00		
T. A. Callaghan	92 00		
Elizabeth Cox	75 00		
F. J. Coulter	75 00		
Amounts carried forward .	$349 00	$71,267 94	$73,000 00

Amounts brought forward .	$349 00	$71,267 94	$73,000 00
For use of horses and men : —			
Wm. Condon	6 00		
Colby Bros.	50 00		
John Doody	98 50		
Elliott & Duvey	97 00		
Austin Ford & Son . . .	52 50		
Thos. McSorley	20 50		
		673 50	
Vitriol, Soda, etc., Poor, Towne & Co.		187 91	
Washing bedding, etc. . .		359 34	
Total			72,488 69
Balance unexpended . .			$511 31

SUMMARY OF EXPENDITURES.

Salaries	$53,663 27
Extra men and horses . .	673 50
Apparatus and repairs . .	6,036 04
Chemicals	187 91
Carriage hire and refreshments	38 50
Expressage	33 05
Fuel	1,727 61
Furniture and bedding . .	1,118 97
Harness and repairs . . .	740 35
Hardware, tools, and supplies	453 20
Hay, grain, and straw . .	3,448 59
Horses	1,385 00
Horse shoeing, etc. . . .	674 38
Hose and repairs	780 77
Ice	48 48
Lighting	877 75
Moving bell	35 00
Oil, copper waste, etc. . .	163 23
Stationery and printing . .	43 75
Washing bedding, etc. . .	359 34
	$72,488 69

Health Department.

Appropriation			$5,500 00
Transferred from Incidental Expenses			700 00
			$6,200 00

EXPENDED.

For Salaries of			
Medical Inspector, Dr. E. Farnham	$2,199 96		
Sanitary Inspectors: —			
Benj. F. Chase	67 50		
Edw. F. Chase	900 00		
Wm. A. Ford	39 45		
Chas. A. Lincoln	537 50		
Secretary, James B. Soper	1,000 00		
		$4,744 41	
Atlas, G. W. Bromley & Co.		15 00	
Advertising: —			
D. A. Buckley	6 75		
Camb. Chronicle Co.	31 00		
James Cox	30 75		
F. S. Hill	8 75		
		77 25	
Cash paid for burying dead animals		79 18	
Car tickets, W. E. St. Railway Co.		225 00	
Carriage hire, Whiting & Smith		4 00	
Chart, Dr. E. Farnham		7 00	
Carpentry, W. H. Norris		3 09	
Directory, E. F. Hunt & Co.		3 00	
Drugs, W. A. Claflin		98 83	
Electric Supplies, Pettingell, Andrews Co.		7 46	
Furniture, Phillips Bros. & Co.		5 50	
Indexing Reports, W. B. Briggs		3 20	
Justice of Peace, Qualification, Jas. B. Soper		7 00	
Plans, Geo. Forgerty		30 00	
Services: —			
Dr. L. L. Bryant	80 00		
Amounts carried forward	$80 00	$5,309 92	$6,200 00

Amounts brought forward .	$80 00	$5,309 92	$6,200 00
For services: —			
Dr. Geo. A. Coburn . .	60 00		
Dr. F. W. Taylor . . .	56 25		
		196 25	
Serving notices, sundry constables		8 90	
Stationery and printing : —			
Camb. Chronicle Co. . .	16 00		
Jas. H. Cox	99 25		
Cotton & Gould	34 47		
James Cox	73 00		
Dr. E. Farnham	1 00		
Harvard Printing Co. . .	67 54		
Library Bureau	29 75		
Henry W. Pitman . . .	30 25		
Stationery Department .	1 63		
E. W. Wheeler	20 00		
W. H. Wheeler	20 00		
		392 89	
Supplies and hardware : —			
T. S. Buck	2 75		
Burditt & Bynner . . .	1 30		
A. W. Mitchell Mfg. Co. .	1 50		
A. M. Robbins	48		
Whittier Hardware Co. .	90		
E. F. Hunt & Co. . . .	1 75		
		8 68	
Typewriting, Miss E. M. Smith		15 95	
Vaccinators and Cow-pox points : —			
Codman & Shurtleff . .	90		
A. A. Reed	161 05		
		161 95	
Virus, N. E. Vaccine Co. .		3 34	
Total			6,097 88
Balance unexpended . .			$102 12

SUMMARY.

Salaries	$4,744 41
Car tickets	225 00
Stationery and printing . .	470 14
Vaccinations	358 20
Miscellaneous	300 13
	$6,097 88

Incidental Expenses.

Appropriation			$10,000 00
Additional Appropriation from unestimated revenue			8,588 58
Transferred from Interest			1,000 00
			$19,588 58
Transferred to			
Ambulance Department		$625 00	
Bulkhead, Main Street		1,000 00	
City Clerk's Department		29 55	
City Clerk's Department Election Expenses		400 72	
Health Department		700 00	
Inspection of Milk and Vinegar		50 00	
Lamp Department		1,000 00	
School Department, incidentals		178 13	
Stationery and printing		139 13	4,122 53
			$15,466 05

RECEIVED.

For Engine House and land, Ward Four	$6,000 00	
Liquor Licenses (Druggists)	49 00	
Pedler "	25 00	
Mass. Reports and Digest	184 00	
Part of execution of damages	220 00	
Receipts of auction sale	200 00	
Rent of land	208 38	
Sale of land, Porter Street	700 00	
Taxes (Old)	1,002 20	
		$8,588 58

EXPENDED.

For Ambulance fees, C. W. Dailey		$264 00	
Travelling expenses to Lowell, Dr. Bryant		6 00	
City Council expenses :—			
Salaries of Clerk, Edw. J. Brandon	$300 00		
Page, Chas. M. Jones	50 00		
Amounts carried forward	$350 00	$270 00	$15,466 05

Amounts brought forward .	$350 00	$270 00	$15,466 05
For City Council expenses : —			
Atlases, G. W. Bromley & Co.	75 00		
Carriage hire	114 00		
Car tickets, W. E. St. Railway Co.	360 00		
Refreshments, M. R. Jones .	84 00		
Floral designs, P. O'Brien & Son	30 00		
		1,013 00	
Civil Service Investigation : —			
Advertising	10 12		
Clerical Assistance	98 76		
Reporting, Eliz'th McGinnis	75 00		
Stationery	30 63		
		214 51	
Commission on sale of building, P. Allen Lindsey.		46 00	
Damages : —			
Margaret Baker	10 00		
Jacob N. Burleigh	140 00		
Bridget Griffin	100 00		
John Leahy	30 00		
Mary Nevins	25 00		
Mary A. Power	200 00		
Dennis Reardon	29 00		
Catherine Sullivan	150 00		
		684 00	
Defense of Knibbs Valve Patent Suit, Fish, Richardson & Storrow		280 24	
Expense of suit, Jno. F. Shannon		20 00	
Executions of Court : —			
Thomas Fitman	150 00		
Andrew Fiske	215 00		
Mary J. Fogarty	225 00		
Andrew L. Lamont *et als* . .	250 00		
Anna Moses	415 00		
N. Y. Biscuit Co.	4,837 42		
Mary A. Palfrey	1,000 00		
Orrin T. Wilkins	808 24		
Nora J. Winn and D. Frank Place	700 00		
		8,600 66	
Amounts carried forward .		$11,128 41	$15,466 05

Amounts brought forward . .		$11,128 41	$15,466 05
For Examination of titles : —			
Wm. E. Hutchins	20 00		
Kern & McLoud	25 00		
Wm. V. Thompson	221 00		
		266 00	
Hire of targets at Walnut Hill, and Transportation, Co. B, First Reg. M. V. M. . . .		150 00	
Hospital Building : —			
Carriage hire	17 00		
Services of Ellis & Melledge .	150 00		
		167 00	
Invalid tax titles: —			
Michael Barrett	36 25		
Annie T. Belcher	18 00		
A. V. Lynde	83 85		
Stephen P. Weld	220 14		
Willard Welsh	43 40		
		401 64	
Liquor License fees, Commonwealth of Massachusetts		14 00	
Legislative pamphlets, Alfred Mudge & Son		27 20	
Memorial Day expenses . .		1,000 00	
Mounting maps, H. A. Scranton		23 25	
Newspapers, James Cox . .		1 40	
Proprietors Records (copying) Sarah S. Jacobs	229 50		
Reading glass, Thorp & Martin Co.	2 50		
Stationery, Cotton & Gould .	4 25		
		236 25	
Repairs on Mt. Auburn Street, Sundry persons		46 00	
Ringing bells on holidays . .		90 00	
Release of tax title		33 93	
Services of F. G. Cook, Esq., as legal counsel in criminal prosecutions		728 00	
Amounts carried forward . .		$14,313 08	$15,466 05

Amounts brought forward .	$14,313 08	$15,466 05
For Services of Acting City Physician, H. E. Knowlton, M. D.	60 00	
Taxes, City of Somerville, (Almshouse Lands) . . .	925 20	
Setting Memorial Stones, Peter Nelligan	50 00	
Total		15,348 28
Balance unexpended . .		$117 77

SUMMARY OF EXPENDITURES.

Ambulance expenses . . .	$270 00
City Council expenses . .	1,013 00
Civil Service investigation .	214 51
Damages awarded	684 00
Defence of suits	300 24
Executions of court . . .	8,600 66
Examination of titles . . .	266 00
Expenses incurred for Hospital Site	167 00
Hire of Target, etc., for Militia	150 00
Invalid tax titles	435 77
Memorial Day expenses . .	1,000 00
Proprietors Records . . .	236 25
Professional services in criminal cases	728 00
Ringing bells on holidays .	90 00
Services of acting city physician	60 00
Setting memorial stones . .	50 00
Somerville tax on Almshouse land	925 20
Sundries	157 85
	$15,348 48

Inspection of Milk and Vinegar.

Appropriation			$1,300 00
Transferred from Incidental Expenses			50 00
			$1,350 00
RECEIVED.			
For Milk and Butterine Licenses		$140 00	
EXPENDED.			
For salaries of			
Inspector, Dr. F. A. Dunbar	$900 00		
Deputy, John F. Wheeler	301 29		
		1,201 29	
Car tickets, W. E. St. Railway Co.		30 00	
Cologne, Burditt & Bynner		3 00	
Directory, E. F. Hunt & Co.		3 00	
Expressage, Savage & Son		2 35	
Samples, John F. Wheeler		30 51	
Stationery and printing: —			
Cambridge Chronicle Co.	4 50		
Cotton & Gould	15 00		
Jas. H. Cox	7 00		
Harvard Printing Co.	4 85		
A. E. Martell & Co.	3 50		
Stationery Department	7 50		
		42 35	
Use of Horse and Buggy, G. Davoran.		37 50	
Total			1,350 00

Inspection of Provisions.

Appropriation			$800 00
EXPENDED.			
For salary of			
Dr. C. E. Hadcock		$699 96	
Salts, chemicals, drugs: —			
Walter A. Chaflin	$43 30		
Henry Thayer & Co.	12 80		
		56 10	
Total			756 06
Balance unexpended			$43 94

Inspection of Wires.

Appropriation			$9,600 00
Revenue appropriated			549 71
			$10,149 71

RECEIVED.

For labor and materials		$549 71	

EXPENDED.

For Salaries: —			
Inspector, Chas. H. Morse	$1,000 00		
Assistants, Edw. Backus	1,014 00		
Geo. J. Blaisdell	1,172 97		
David J. Campbell	623 98		
Smith Morey	187 86		
Wm. C. Pierce	1,014 00		
J. J. Ruddick	332 50		
Oscar L. Whitney	607 13		
Clerk, Elizabeth McGinnis	230 00		
Temporary assistants	65 25		
		6,247 69	
Apparatus and supplies: —			
Bay State Metal Works	20 80		
C. G. H. Bennink	21 76		
Boston Woven Hose Co.	22 53		
J. H. Bunnell & Co.	67 00		
Cambridge Electric Light Co.	35 25		
Chapman Carriage Co.	6 25		
Electric Gas Lighting Co.	24 59		
Gillis & Gleeson	337 46		
Holtzer Cabot Electric Co.	20 98		
Albert E. Hughes	36 00		
Municipal Fire & Police Tel. Co.	210 00		
National Tel. Mfg Co.	40 50		
Pettingell, Andrews Co.	524 21		
J. J. Ruddick	75 00		
Geo. M. Stevens	428 09		
Union Glass Co.	8 70		
Ward & Nash	8 82		
Weeks & Potter Co.	40 55		
Sundry persons	11 13		
		1,939 62	
Amounts carried forward		$8,187 31	$10,149 71

Amounts brought forward .		$8,187 31	$10,149 71
Board of horses: —			
Fire Department . . .	$117 00		
Gwynne & Co.	300 00		
Whiting & Smith . . .	151 00		
		568 00	
Carpentry: —			
Ira G. Hersey	68 75		
W. H. Norris	48 79		
M. F. Tracy & Son . . .	2 85		
		120 39	
Car tickets, W. E. St. Railway Co.		90 00	
Carriage hire for committee, James McGovern . . .		6 00	
Carriage repairs, Chapman Carriage Co.		130 07	
Eyelet Press, E. L. Sibley .		4 00	
Expressage		27 45	
Furniture and carpets, Worcester Bros.		11 62	
Fuel, Richardson & Bacon .		4 25	
Hardware, tools and supplies: —			
Burditt & Bynner . . .	167 62		
Chandler & Farquhar . .	8 49		
Greene & Co.	5 11		
Keystone Mfg. Co. . . .	5 00		
F. A. White	13 59		
A. J. Wilkinson & Co. .	31 80		
Sundry persons	8 67		
		240 28	
Harness and repairs: —			
Chas. E. Berry	2 00		
John Hancock	15 25		
G. A. Morse	17 50		
J. F. Nolan	8 00		
		42 75	
Horse-shoeing, Wm. Balmer		71 00	
Lamps, lantern globes: —			
Boston Woven Hose Co. .	2 25		
Cambridge Electric Light Co.	17 47		
Capt. A. de Khotinsky .	8 85		
		28 57	
Amounts carried forward .		$9,531 69	$10,149 71

Amounts brought forward .		$9,531 69	10,149 71
For Lights, Cambridge Electric Light Co.		66 60	
Photo. Views, Walter H. Lerned, Jr.		15 00	
Reports of Hearings, Arthur T. Lovell		31 85	
Searching Records, Geo. H. Munroe		5 00	
Stationery and printing: —			
Cambridge Chronicle Co. .	$35 00		
Harvard Printing Co. . .	11 25		
Stationery Department .	25 35		
		71 60	
Sundries		13 30	
Telephone rent and tolls, N. E. Telephone Co. . . .		376 13	
Washing bedding, Fannie E. Blaisdell		36 84	
Total			10,148 01
Balance unexpended . .			$1 70

SUMMARY OF EXPENDITURES.

Apparatus and supplies . .	$2,225 77
Carpentry	120 39
Care of horses, shoeing, harness, etc.	811 82
Car tickets, carriage hire, etc.	96 00
Expressage	27 45
Furniture, etc.	11 62
Fuel, lights, etc.	70 85
Photos.	15 00
Salaries, labor, etc. . . .	6,247 69
Stationery and printing . .	71 60
Sundries	36 85
Telephone rent and tolls . .	376 13
Washing bedding	36 84
	$10,148 01

Interest.

Appropriation			$138,000 00
Transferred to Incidental Expenses	$1,000 00		
Overseers of the poor	5,000 00		
School Department, salaries	4,000 00		
		10,000 00	
		$128,000 00	

RECEIVED.

For accrued interest on bonds	$1,538 33		
Deposits	3,337 00		
Premium on sale of bonds	43,010 75		
Taxes	4,049 63		
Temporary loan	10 00		
		51,945 71	

EXPENDED.

For interest on			
Cemetery Fund	$1,128 05		
Contingent Loan	8,000 00		
Daniel White Charity	225 00		
Dowse Institute Fund	600 00		
Funded Loan.	112,780 00		
Sanders Temperance Fund	450 00		
Temporary Loan Note	3,106 15		
Total			126,289 20
Balance unexpended			$1,710 80

Lamp Department.

Appropriation			$68,000 00
Transferred from Incidental Expenses			1,000 00
			$69,000 00

EXPENDED.

For salaries: —			
Supt., Chas. H. Morse	$1,000 00		
Lamplighters, as per pay rolls	3,668 00		
Temporary clerk	65 00		
		$4,733 00	
Board of horse, Whiting & Smith		153 80	
Amounts carried forward.		$4,886 80	$69 000 00

Amounts brought forward .		$4,886 80	$69,000 00
For Carriage hire for committee: —			
J. E. Fabyan	$5 00		
Lake & Moynahan . . .	5 00		
James McGovern . . .	5 00		
John Nixon	18 00		
Whiting & Smith . . .	5 00		
		38 00	
Carriage repairs, Chapman Carriage Co.		22 00	
Electric supplies, Gillis & Gleeson		109 25	
Hardware, tools and repairs: —			
Burditt & Bynner . . .	15 65		
Sundry persons	6 70		
		22 35	
Labor, Inspection of Wires Department		150 00	
Lamp chimneys, wicks, etc.: —			
Jones, McDuffie & Stratton	49 00		
Union Glass Co.	7 75		
		56 75	
Lighting streets: —			
Camb. Elec. Light Co. arc	51,210 95		
Incandescent	5,733 79		
Cambridge Gas Light Co.	6,460 74		
Repairs	4 00		
Maintenance of lights on Grove Street, town of Belmont	48 00		
		63,457 48	
Lunches for committee, M. R. Jones		38 75	
Matches		5 20	
Oil: —			
Standard Oil Company . .	84 11		
F. A. White	26 15		
		110 26	
Stationery and printing: —			
Cotton & Gould	15 25		
James H. Cox	11 50		
Amounts carried forward .	$26 75	$68,896 84	$69,000 00

Amounts brought forward .	$26 75	$68,896 84	$69,000 00
For Stationery and printing: —			
Sundry persons	9 75		
		36 50	
Sundries		7 02	
Supplies		5 50	
Typewriter supplies and exchange, Hammond Typewriter Co.		42 95	
Total			68,988 81
Balance unexpended . .			$11 19

SUMMARY OF EXPENDITURES.

Care of horse, harness, etc. .	$175 80
Carriage hire and refreshments	76 75
Hardware, tools and supplies	144 12
Lighting streets	63,457 48
Oil, matches, chimneys, etc.	172 21
Salaries, labor, etc. . . .	4,883 00
Stationery and printing . .	36 50
Typewriter	42 95
	$68,988 81

Land Damages — Blackstone Street.

Appropriation		$5,500 00
EXPENDED.		
For land, Heirs of Chas. C. Little	$5,500 00	
Total		5,500 00

Land Damages — Cushing Street.

Appropriation		$163 50
EXPENDED.		
For land and damages : —		
William Kelley	$56 10	
William Lenox	22 50	
Total		78 60
Balance unexpended . .		$84 90

Land Damages — Fairmont Avenue.

Appropriation		$403 24
Additional appropriation		296 76
		$700 00
EXPENDED.		
For land and damage, John Riley, Jr.	$700 00	
Total		700 00

Land Damages — Huron Street.

Appropriation		$4,930 10
EXPENDED.		
For land: —		
Heirs of Chas. C. Little	$1,349 60	
Dev. of John Brewster	147 90	
Total		1,497 50
Balance unexpended		$3,432 60

Land Damages — Main Street.

Appropriation		$2,090 00
EXPENDED.		
For land, Union Methodist Episcopal Church	$2,090 00	
Total		2,090 00

Land Damages — Mt. Auburn Street.

Appropriation		$1,300 00
EXPENDED.		
For land and damage: —		
Mt. Auburn Cemetery Corporation	$506 80	
Heirs of Robert L. Sands	31 60	
Emma L. Sands	6 40	
Geo. R. Sands	55 60	
Total		600 40
Balance unexpended		$699 60

Land Damages — North Avenue.

Appropriation		$675 60
EXPENDED.		
For land, Edward A. Muller	$675 60	
Total		675 60

Land Damages — Norton Street.

Appropriation		$1,359 77
EXPENDED.		
For land: —		
Fannie G. Black	$274 24	
John Cotter	100 74	
A. J. Daly	134 34	
Mary C. Tolman	114 69	
Michael F. Tracy	135 68	
Total		759 69
Balance unexpended		$600 08

Land Damages — Wyeth Street.

Appropriation			$11,714 99
EXPENDED.			
For land and damage: —			
E. L. & C. H. Bond	$24 00		
Edw. B. O'Brien	237 20		
Estate of Jeffrey O'Brien	310 25		
John F. O'Brien	10 00		
Heirs of Patrick O'Brien	3,740 00		
H. F. Prince	1,321 40		
Mary J. Smith	2,341 40		
Zabdiel A. Willard	879 50		
Andrew N. Wyeth	1,556 34		
		$10,420 09	
Experts: —			
Millard Fillmore	5 00		
Albert B. Hopkins	22 00		
J. H. Keenan	5 00		
C. L. Weldon	15 00		
R. & C. G. Wentworth	15 00		
		62 00	
Total			10,482 09
Balance unexpended			$1,232 90

Law Department.

Appropriation			$3,300 00
RECEIVED.			
Costs in Watson case		$17 45	
For services of city solicitor in water cases: —			
Cambridge Water Works .		1,500 00	
		$1,517 45	
EXPENDED.			
Salary, city solicitor, G. A. A. Pevey		$2,500 00	
Car tickets, W. E. St. Railway Co.		90 00	
Cash expended, G. A. A. Pevey		92 40	
Copying, Miss H. J. Wescott		4 25	
Directory, E. F. Hunt & Co.		3 00	
Expert		15 00	
Examination of Records, Edw. H. Thomson . . .		20 00	
Massachusetts Statutes and Binding, Little, Brown & Co.		15 10	
Services: —			
W. D. Austin	$10 00		
John R. Fairbairn . . .	17 09		
F. E. Shaw	5 20		
W. C. Wardwell	14 38		
		46 67	
Stationery and printing: —			
T. H. Ball	75 22		
Geo. E. Crosby & Co. . .	20 00		
Thos. Groom	26 00		
Stationery Department .	21 02		
		142 24	
Typewriting, Geo. B. French		344 28	
Total			3,272 94
Balance unexpended . .			$27 06

Overseers of the Poor (Almshouse Department).

Appropriation			$20,000 00
Unestimated revenue	$930 65		
Transferred from House Offal	1,000 00		
			1,930 65
			$21,930 65

RECEIVED.

For Board of inmates	$736 11		
Barrels	54 36		
Burial of paupers	25 45		
Commonwealth of Massachusetts	333 33		
Damage to property	421 80		
Grease and bones	96 47		
Old materials	40 80		
Proceeds of chair shop	221 98		
Weighing fees	35		
		$1,930 65	

EXPENDED.

For salaries of			
Supt., M. L. Eldridge	$1,500 00		
Asst. Supt., M. A. Warren	334 29		
Asst. Supt., Sam'l F. Norris.	319 29		
Chaplain, F. W. Holland	100 00		
Sundry House Officials	4,725 31		
Music teacher, M. G. Hillman	108 00		
		7,086 89	
Advertising, James Cox		6 00	
Board: —			
Boston Children's Aid Society	40 14		
Carney Hospital	38 29		
City of Lowell	1,015 72		
Essex Co. Truant School	45 00		
		1,139 15	
Burials, H. D. Litchfield		87 00	
Burial fees, Cemetery Dept.		34 00	
Care of infants, Margaret McGowan		8 00	
Car tickets, W. E. St. Railway Co.		90 00	
Cash expended for sundries, M. L. Eldridge		279 75	
Amounts carried forward		$8,730 79	$21,930 65

Amounts brought forward .		$8,730 79	$21,930 65
For Cleaning, Margaret McGowan		11 00	
Clothing, dry goods, boots and shoes: —			
Brown, Durrell & Co. . .	$428 09		
J. H. Corcoran & Co. . .	27 14		
Dyer, Rice & Co. . . .	24 13		
F. E. Eldridge	8 75		
F. Fischer	10 55		
Jordan, Marsh & Co. . .	771 83		
Mass. Boot & Shoe Co. .	61 95		
L. Morse & Co.	309 50		
Wm. Myers	94 15		
Shaw Bros. & Co. . . .	36 00		
Smith, Carter, Conner & Co.	244 25		
H. Sleap & Co.	53 60		
C. D. Wilder	40 00		
		2,109 94	
Directory, W. A. Greenough & Co.		3 00	
Disinfectants: —			
J. F. Fuller & Co. . . .	17 50		
C. W. Lerned & Co. . .	13 00		
		30 50	
Expenses in arrest of J. W. Morrissey, H. E. Swan. .		4 45	
Expressage, Bancroft's Express.		24 10	
Fuel: —			
L. G. Burnham & Co. . .	1,055 00		
Clark Bros.	126 11		
		1,181 11	
Weighing coal, H. W. Brooks		12 50	
Furniture and furnishings: —			
D. W. Gage	13 50		
Milton Gage	4 78		
Greenwood & Co. . . .	30 40		
Geo. R. McFarlin . . .	6 08		
John H. Pray, Sons & Co.	17 89		
Prescott Bros.	14 00		
Henry E. Turner, Assignee	31 40		
Worcester Bros.	39 00		
		157 05	
Amounts carried forward .		$12,264 44	$21,930 65

Amounts brought forward .		$12,264 44	$21,930 65
For Gas, Cambridge Gas Light Co.		233 87	
Hardware, tools, and supplies: —			
Jos. Breck & Son . . .	$3 75		
Burditt & Bynner . . .	158 62		
Dodge, Haley & Co. . .	1 00		
Walker & Pratt Mfg. Co. .	16 50		
F. A. White	117 68		
Walworth Mfg. Co. . . .	63 49		
		361 04	
Hay and grain, Clark Bros. .		82 89	
Hose and rubber goods, C. S. Knowles		44 24	
House repairs: —			
Carpentry,			
J. H. Keenan	36 74		
A. L. Teele	5 00		
Sewell, Adams & Co. .	3 24		
Electric work, Inspection of Wires Department .	20 00		
Masonry, A. F. Stackelborg	50 00		
Painting,			
J. J. Shedd	11 83		
Albert L. Teele . . .	35 00		
Plastering, Harrington & Howell	65 00		
Plumbing,			
Geo. V. Eldridge . . .	257 83		
John H. Stevens & Co. .	8 88		
Pump repairs, Geo. F. Blake Mfg. Co. . . .	4 20		
Roof repairs,			
John J. Blevins . . .	49 54		
Matthew Dalton . . .	34 25		
A. F. Stackelborg . .	57 50		
		639 01	
Ice, H. D. & W. S. Durgin .		55 30	
Labor, James Prendable . .		35 00	
Lumber, lime, and cement: —			
Geo. W. Gale, Lumber Co.	86 70		
Sewell, Adams & Co. . .	57 23		
Wm. H. Wood & Co. . .	9 65		
		153 58	
Amounts carried forward . .		$13,869 37	$21,930 65

Amounts brought forward . .		$13,869 37	$21,930 65
For Massachusetts Statutes, Little, Brown & Co.		7 10	
Medicines, drugs, etc.: —			
Gilman Bros.	$279 63		
Chas. S. Lombard . . .	25 63		
F. H. Willard	1 50		
		306 76	
Medical instruments and surgical apparatus: —			
Codman & Shurtleff . .	5 99		
W. H. Phelps & Co. . .	20 50		
		26 49	
Newspapers, Jas. W. Hunnewell		24 00	
Nurses: —			
Mary Breaton	22 00		
Wm. Hunt	8 00		
		30 00	
Oil, W. A. Wood & Co. . .		10 58	
Pipe, D. W. Lewis		13 59	
Professional services, F. W. Taylor, M. D.		20 00	
Stationery and printing: —			
F. W. Barry, Beale & Co.	9 94		
Cotton & Gould	11 12		
Harvard Printing Co. . .	3 00		
		24 06	
Soap, F. H. Teele		190 00	
Subsistance supplies: —			
Armour & Co.	251 94		
Boyd, Leeds & Co. . . .	597 44		
Brock & Whitaker . . .	1,199 15		
Geo. H. Chessman & Co. .	8 50		
Geo. Close	13 00		
Cobb, Bates & Yerxa . .	192 65		
Cambridge Baking Co. .	45 85		
Cheney, Upham & Co. .	34 90		
Clark Bros.	44 35		
John Cummings	29 20		
Chas. L. Davenport . .	15 90		
R. S. Edwards & Co. . .	18 00		
John Groves & Co. . . .	11 20		
Amounts carried forward .	$2,462 08	$14,521 95	$21,930 65

Amounts brought forward .	$2,462 08	$14,521 95	$21,930 65
For subsistence supplies: —			
J. J. Hill	858 64		
F. M. Holmes	35 20		
L. L. Kimball & Co. . .	9 60		
A. J. Lovell & Co. . . .	82 39		
McPherson Bros. . . .	474 51		
Chas. E. Moody & Co. .	82 03		
Walter Nash	645 22		
N. Y. Biscuit Co. . . .	70 69		
F. D. Norton	318 01		
Geo. G. Parker	29 34		
F. Putnam & Co. . . .	418 08		
A. G. Patch & Co. . . .	2 50		
Geo. E. Richardson & Co.	22 14		
Sands, Page & Taylor . .	197 25		
W. Sanderson	19 20		
S. S. Sleeper & Co. . . .	95 35		
H. W. Spurr & Co. . . .	23 81		
L. A. Treat	141 76		
Utley & Rogers	384 26		
S. P. Worthley	862 90		
		7,234 96	
Telephone rent and tolls, N. E. Telephone Co. . .		69 92	
Sundries : —			
F. Fischer	3 45		
A. J. Jones	1 75		
M. R. Jouett & Co. . .	3 00		
Horace Partridge & Co. .	2 53		
A. J. Sawyer	1 00		
		11 73	
Total			21,838 56
Balance unexpended . .			$92 09

SUMMARY OF EXPENDITURES.

Board		$1,139 15
Burials		121 00
Car tickets		90 00
Clothing, dry goods, boots, shoes, etc.		2,109 94
Amount carried forward		$3,460 09

Amount brought forward . .	$3,460 09	
For Expressage	24 10	
Fuel and lights	1,427 48	
Furniture and furnishings .	201 29	
Hardware, tools and supplies.	361 04	
House repairs	639 01	
Lumber, lime and cement .	153 58	
Medicine and medical instruments	363 75	
Newspapers	24 00	
Salaries and labor	7,121 89	
Services of nurse and physician	58 00	
Stationery and printing . .	24 06	
Subsistence supplies	7,563 15	
Sundries	347 20	
Telephone rent and tolls . .	69 92	
	$21,838 56	

Overseers of the Poor (Farm and Ledge).

Appropriation			$8,000 00
Surplus revenue			1,460 08
			$9,460 08

RECEIVED.

Damage to crops	$100 00	
Flag-stones	4 75	
Hogs	197 89	
Pigs	126 00	
Produce	5,419 05	
Stone	8,612 39	
		$14,460 08

EXPENDED.

Farm Department.

For Labor on farm : —			
Farmer, James Welch . .	$787 50		
Employees, as per pay rolls .	1,890 75		
		2,678 25	
Bean Poles, Coleman Bros. .		6 66	
Cow, Jeremiah Sullivan . .		60 00	
Boxes, Woodward Mason Co.		9 00	
Dust, Otis S. Brown & Co. .		1 75	
Amounts carried forward .		$2,755 66	$9,460 08

Amounts brought forward .		$2,755 66	$9,460 08
For Flower pots, A. H. Hews & Co.		7 09	
Hay, grain : —			
Clark Bros.	$250 47		
Sylvester Frost	44 40		
		294 87	
Hemp, M. F. Whiton & Co.		11 44	
Horse-shoeing : —			
Gerry and Rufer	4 50		
J. B. Rufer	11 25		
		15 75	
Hose, etc., C. S. Knowles .		28 50	
Labor : —			
James Chenery	20 52		
John Flynn	135 00		
John Kenney	80 00		
Thos. O'Hara	120 00		
David Welch	18 00		
		373 52	
Lumber, Geo. W. Gale Lumber Co.		140 87	
Manure : —			
David Barry	9 75		
T. A. Callaghan	53 88		
E. Frederickson	35 13		
S. Girstien	41 47		
S. Guitison	44 39		
M. Martell	10 12		
F. McConologue	33 03		
N. J. McConologue . . .	34 80		
J. McCrehan	12 92		
John Quinn	59 06		
Sundry persons	13 48		
James Welch	6 00		
		354 03	
Market expenses, M. L. Eldridge		44 80	
Pigs : —			
I. B. Cook	24 00		
J. P. Dailey	25 00		
John P. Taylor	42 50		
J. W. Whalen	40 00		
Amounts carried forward .	$131 50	$4,026 53	$9,460 08

Amounts brought forward .	$131 50	$4,026 53	$9,460 08
For pigs —			
Geo. P. Winn	30 00		
		161 50	
Pullets, M. L. Eldridge . .		18 00	
Printing, Harvard Printing Co.		3 00	
Rent of Stand, Mercantile Wharf Corp.		80 00	
Sashes for hot-beds			
Bailey & Hersey	80 00		
Cutter & Parker	36 75		
		116 75	
Seeds, plants : —			
Wm. A. Bock	4 65		
Jos. Breck & Sons . . .	25 55		
Schlegel & Fottler . . .	111 36		
		141 56	
Tools, Jos. Breck & Sons .		28 34	
Farm total		$4,575 68	

Ledge Department.

Labor on ledge : —			
Foreman, Michael Callahan	$782 50		
Employees, as per pay rolls	2,898 00		
		$3,680 50	
Powder, etc.: —			
American Powder Mills .	41 83		
Geo. H. Sampson . . .	349 72		
		391 55	
Repairing tools: —			
R. S. Easter & Son . . .	91 30		
W. A. Easter	68 60		
A. W. Ganong	16 70		
		176 60	
Stationery, F. W. Barry, Beale & Co.		5 55	
Tools, hardware, Dodge, Haley & Co.		55 80	
Ledge Total		$4,310 00	
Total			8,885 68
Balance unexpended . .			$574 40

SUMMARY OF EXPENDITURES.

Farm: —	
Labor	$3,051 77
Cows, pigs, and pullets	239 50
Hay and grain	296 62
Horse-shoeing	15 75
Hose	28 50
Hot-bed sashes	116 75
Lumber	140 87
Market expenses	133 80
Manure	354 03
Seeds, plants, etc.	141 56
Tools and supplies	56 53
	$4,575 68
Ledge: —	
Labor	3,680 50
Hardware, tools, etc.	232 40
Powder and fuse	391 55
Stationery	5 55
	$4,310 00

Overseers of the Poor (House Offal).

Appropriation			$24,000 00
Unestimated revenue			1,218 96
			$25,218 96
Transferred to Almshouse Department			1,000 00
			$24,218 96

RECEIVED.

For sale of house offal	$8,218 96	

EXPENDED.

For labor as per pay rolls		18,845 00	
Bricks: —			
Parry Bros. & Co.	$1 50		
D. Warren De Rosay	22 50		
		24 00	
Cash for carpentry, M. L. Eldridge		40 00	
Amounts carried forward		$18,909 00	$24,218 96

Amounts brought forward .		$18,909 00	$24,218 96
For Compensation for injuries, Patrick Kelleher		60 00	
Disinfectant, C. W. Lerned & Co.		29 60	
Door, blinds, etc., A. W. Hastings & Co.		43 28	
Harness and repairs: —			
F. Ivers & Son	$33 25		
Joseph Ryan	31 95		
Ryan & Wilson	48 95		
		114 15	
Hay and grain: —			
Otis S. Brown & Co. . .	208 00		
Clark Bros.	1,043 19		
A. Fitch & Co.	198 90		
E. R. Luke & Co. . . .	43 72		
H. H. Turner & Co. . .	712 26		
Geo. G. Wright	653 18		
		2,859 25	
Horses: —			
C. T. Walker & Sons . .	102 50		
Welch & Hall	155 00		
		257 50	
Horse-shoeing, Wm. Bell .		429 80	
Labor: —			
Wm. S. Horan	18 00		
Michael Morrissey . . .	18 00		
Albert L. Teele	125 00		
Hugh Toomey	120 00		
		281 00	
Lumber, lime, and cement: —			
Geo. W. Gale Lumber Co.	329 70		
Sewell, Adams & Co. . .	65 46		
Wm. H. Wood & Co. . .	8 80		
		403 96	
Mason work, Wm. J. Bellis .		31 00	
Pipe and fittings: —			
D. W. Lewis	1 80		
Walworth Mfg. Co. . . .	28 82		
		30 62	
Plumbing, W. B. Kneeland .		84 37	
Printing, Harvard Printing Co.		9 50	
Amounts carried forward .		$23,543 03	$24,218 96

Amounts brought forward .		$23,543 03	$24,218 96
For Sundries: —			
W. G. Claflin	$2 75		
N. Y. Biscuit Co. . . .	2 00		
Alden Speare's Sons & Co.	4 50		
		9 25	
Tools and repairs, hardware and supplies: —			
Burditt & Bynner . . .	45 46		
W. A. Easter	95 60		
Dodge, Haley & Co. . .	2 02		
A. W. Ganong	5 35		
		148 43	
Wagon repairs: —			
R. S. Easter & Son . . .	264 15		
W. A. Easter	4 00		
J. A. Henderson & Son .	164 56		
		432 71	
Total			24,133 42
Balance unexpended . .			$85 54

SUMMARY OF EXPENDITURES.

Bricks	$24 00
Carpentry	40 00
Disinfectant	29 60
Doors, blinds, etc.	43 28
Hardware, tools, etc. . . .	148 43
Harness and repairs . . .	114 15
Hay and grain	2,859 25
Horses	257 50
Horse-shoeing	429 80
Labor	19,186 00
Lumber, lime, and cement .	403 96
Mason work	31 00
Plumbing	114 99
Sundries	18 75
Wagon repairs	432 71
	$24,133 42

Overseers of the Poor (Outside Aid).

Appropriation	$38,000 00
Transferred from Interest	5,000 00
Surplus revenue	1,214 86
	$44,214 86

RECEIVED.

For aid to board and burial of paupers: —		
By cities, towns, and individuals	$3,158 55	
Commonwealth of Massachusetts	2,015 93	
Bill withdrawn	40 38	
	$5,214 86	

EXPENDED.

For salaries: —			
Secretary, D. P. Muzzey	$1,500 00		
Visitor, V. Danforth	1,500 00		
Clerk, Addie M. Benson	521 66		
		$3,521 66	
Ambulance fees, Chas. W. Dailey		146 50	
Advertising, James Cox		5 75	
Aid to sundry persons		6,694 41	
By cities and towns: —			
City of Boston	$1,561 92		
Haverhill	89 83		
Lynn	201 00		
Malden	84 80		
Marlboro'	7 00		
Medford	61 20		
New Bedford	97 71		
Quincy	35 00		
Somerville	265 49		
Taunton	7 00		
Waltham	124 30		
Woburn	72 00		
Worcester	5 25		
Town of Arlington	14 61		
Hudson	28 50		
Methuen	159 57		
Sandwich	8 70		
		2,823 88	
Amounts carried forward		$13,192 20	$44,214 86

Amounts brought forward .		$13,192 20	$44,214 86
For Board and care of sundry persons			
At Boston Children's Aid Society	$539 85		
Cambridge Hospital . .	64 00		
Carney Hospital	303 43		
Danvers Lunatic Hospital	2,027 95		
Essex County Truant School	32 50		
Hospital Cottages, for Children, Baldwinville . .	204 75		
House of Correction . .	8 71		
Massachusetts Charitable Eye and Ear Infirmary .	1 00		
Massachusetts General Hospital	16 50		
Massachusetts Hospital for Dipsomaniacs	797 18		
Massachusetts School for Feeble Minded . . .	2,329 31		
Perkins Institute and Massachusetts Institution for the Blind	34 74		
Taunton Lunatic Hospital	169 46		
Westboro Insane Hospital	2,148 28		
Worcester Insane Asylum	2,943 20		
Worcester Lunatic Hospital	6,567 85		
By Commonwealth of Massachusetts: —			
At Danvers Lunatic Hospital	52 46		
Hospital for Dipsomaniacs	131 40		
Massachusetts School for Feeble Minded . . .	125 35		
State Almshouse . . .	1,862 11		
State Farm	663 48		
Westboro Insane Hospital	234 93		
Worcester Lunatic Hospital	1,107 09		
		22,36 553	
Amounts carried forward .		$35,557 73	$44,214 86

Amounts brought forward .		$35,557 73	$44,214 86
For bindings: —			
E. W. Bettinson	$6 00		
J. H. H. McNamee . . .	8 00		
		14 00	
Boots and Shoes, and repairs: —			
E. T. Fogg	138 50		
C. D. Wilder	1,222 50		
Sundry persons	4 25		
		1,365 25	
Burial fees, Cemetery Department		298 00	
Burials, H. D. Litchfield . .		448 10	
Carpentry, W. H. Norris .		3 12	
Car tickets, W. E. St. Railway Co.		250 00	
Cash expended for sundries: —			
Dr. L. L. Bryant . . .	8 00		
V. Danforth	115 72		
D. P. Muzzey	10 86		
		134 58	
Cleaning carpets, W. A. Freeman		8 42	
Clothing and bedding, Jordan, Marsh & Co. . . .		90 62	
Directories: —			
W. A. Greenough & Co. .	8 00		
Sampson, Murdock & Co.	5 00		
		13 00	
Engraving diagram, H. O. Houghton & Co.		9 05	
Flour bags, paper, etc., Wm. H. Claflin & Co.		30 21	
Fuel: —			
Baker, Hunnewell Co. . .	587 41		
Broadway Wood Yard . .	90 00		
L. G. Burnham & Co. . .	1,349 50		
H. Wellington & Co. . .	144 00		
Weighing, H. W. Brooks .	13 75		
		2,184 66	
Amounts carried forward .		$40,406 74	$44,214 86

Amounts brought forward .		$44,406 74	$44,214 86
For furniture : —			
W. H. Phelps & Co. . .	$11 00		
Phillips Bros. & Co. . .	8 50		
Rourke & Moules . . .	6 00		
		25 50	
Gas, Camb. Gas Light Co. .		126 34	
Gas Fittings, Geo. F. Dickson		15 83	
Hardware		8 75	
Ice, Fresh Pond Ice Co. . .		12 20	
Mass. Public Statutes, Little, Brown & Co.		2 85	
Medicines and drugs : —			
A. R. Bayley & Co. . .	8 33		
Elliott Bright	16 92		
C. E. Coombs	13 50		
Gilman Bros.	192 96		
G. F. Harvey Co. . . .	7 80		
W. A. Reeves	9 45		
Reycroft's Pharmacy . .	108 53		
S. H. Talbot	17 14		
Toye's Pharmacy . . .	8 10		
Sundry persons	14 39		
		397 12	
Medical instruments and surgical apparatus : —			
C. H. Goldthwaite & Co. .	17 15		
Sundry persons	7 88		
		25 03	
Nurse, Mrs. Mary Gallagher		5 00	
Office devices, Geo. H. Richter & Co.		46 80	
Plumbing, Levi Hawkes . .		5 69	
Stamp, L. W. Poole . . .		7 00	
Stationery and printing: —			
F. W. Barry, Beale & Co.	94 20		
Cotton & Gould	47 75		
Harvard Printing Co. . .	216 10		
Library Bureau	31 05		
Geo. H. Richter & Co. .	9 65		
Sundry persons	5 25		
		404 00	
Amounts carried forward .		$41,488 85	$44,214 86

Amounts brought forward .		$41,488 85	$44,214 86
For subsistence supplies: —			
Boyd, Leeds & Co. . . .	$15 70		
Clark Bros.	23 60		
Cobb, Bates & Yerxa . .	189 18		
D. H. Dean	222 31		
W. H. Dodge	21 50		
R. S. Edwards & Co. . .	274 97		
J. A. Holmes & Co. . .	576 72		
H. N. Hovey & Co. . .	311 30		
McPherson Bros. . . .	181 74		
Charles E. Moody & Co. .	142 78		
Sands, Page & Taylor . .	448 25		
		2,408 05	
State License, Dr. Chas. E. Vaughan		25 00	
Telephone rent and tolls . .		171 20	
Varnishing		8 75	
Washing		5 00	
Sundries		7 65	
			44,114 50
Balance unexpended . .			$100 36

SUMMARY OF EXPENDITURES.

Salaries	$3,521 66
Aid, board, and care . . .	31 888 82
Ambulance fees	146 50
Boots, shoes, clothing, etc. .	1,455 87
Burial fees	746 10
Car tickets	250 00
Fuel, lights, etc.	2,326 83
Medicine and surgical instruments	422 15
Stationery and printing . .	404 00
Subsistence supplies . . .	2,450 46
Sundries	330 91
Telephone rent and tolls . .	171 20
	$44,114 50

Overseers of the Poor (Salary of Assistant City Physician).

Appropriation		$1,500 00
EXPENDED.		
For salary of Assistant City Physician, Dr. L. L. Bryant,	$1,500 00	
Total		$1,500 00

Overseers of the Poor (Almshouse Fire Protection).

Appropriation		$338 26
EXPENDED.		
For carpentry, J. H. Keenan .	$338 26	
Total		$338 26

Park Department (Construction).

Appropriation			$412,000 00
Unestimated revenue			946 21
			$412,946 21
RECEIVED.			
For collections		$946 21	
EXPENDED.			
For salaries of: —			
Supt. Geo. R. Cook . . .	$1,075 00		
Foremen, Jas. Doherty .	103 51		
John Donnelly . . .	34 38		
John H. McCarthy . .	232 00		
M. L. Wixon	207 50		
Clerk, Elizabeth McGinnis	224 00		
Clerical assistance, Edw. A. Counihan	30 00		
Labor, as per pay rolls . .	4,504 19		
		6,410 58	
Advertising: —			
Boston Daily Advertiser .	32 00		
James Cox	1 87		
		33 87	
Atlas, G. W. Bromley & Co.		25 00	
Boots, H. Sleap & Co. . .		12 75	
Boat, O. Sheldon & Co. . .		39 00	
Amounts carried forward .		$6,521 20	$412,946 21

Amounts brought forward .		$6,521 20	$412,946 21
For board of horse:—			
Street Department . . .	$27 78		
Whiting & Smith . . .	140 67		
	———	$168 45	
Bricks, Chas. McMahon . .		12 53	
Carriage hire:—			
F. D. Bartlett	43 50		
J. E. Fabyan	6 00		
Lake & Moynahan . . .	3 00		
Chas. Waugh & Co. . .	10 00		
Whiting & Smith . . .	6 00		
	———	68 50	
Car tickets, W. E. St. Railway Co.		60 00	
Carpentry:—			
Wm. Lutz	1 50		
W. H. Norris	111 90		
John Quin	773 02		
	———	886 42	
Cash expended:—			
Geo. R. Cook	49 77		
Geo. H. Cox	35 20		
L. M. Hastings	55		
Chas. B. Parker	1 95		
	———	87 47	
Counter and gate, Isaac McLean		76 90	
Directory, E. F. Hunt & Co.		3 00	
Examination of titles:—			
Kern & McLoud	69 00		
Wm. V. Thompson . . .	810 00		
	———	879 00	
Filling, loam and gravel . .		12,614 47	
Furniture:—			
M. W. Cain & Son . . .	55 00		
Derby, Kilmer & Pond Desk Co.	18 00		
Phillips Bros. & Co. . .	32 00		
	———	105 00	
Hardware, tools and repairs:—			
Ames Plow Co.	254 39		
Amounts carried forward .	$254 39	$21,482 94	$412,946 21

Amounts brought forward .	$254 39	$21,482 94	$412,946 21
For hardware, tools, and repairs: —			
Barbour, Stockwell & Co. .	9 90		
C. L. Bradlee	1 35		
Burditt & Bynner . . .	50		
Josiah Cummings, Son & Co.	5 00		
Dodge, Haley & Co. . .	3 91		
Donahue Bros.	1 20		
A. M. Robbins	11 35		
F. A. White	87 73		
A. J. Wilkinson & Co. .	5 20		
		380 53	
Harness and repairs:—			
C. W. Dimick	75 00		
Hugh McCaffrey	26 00		
Henry P. Trask	5 75		
Whiting & Smith . . .	50		
		107 25	
Hire of boat, raft, etc.:—			
Gabriel Farrell	185 75		
Geo. R. Farrell	163 75		
		349 50	
Horse shoeing:—			
G. W. Lowd	10 00		
Whiting & Smith . . .	2 50		
		12 50	
Horse, John Ramsey . . .		200 00	
Hose, Boston Woven Hose Co.		68 00	
Insurance, T. H. Raymond .		79 00	
Labor and materials:—			
Sewer Department . . .	25 65		
Street Department . . .	32 72		
		58 37	
Land:—			
Amos Binney, Attorney .	30,100 00		
Wm. G. Binney, Attorney	4,800 00		
Ferree Brinton	16,500 00		
Walter R. Dyer	5,764 50		
Hypolite Filhoil	5,600 00		
Edwin R. Flint	2,000 00		
Elizabeth M. Fralick . .	1,500 00		
J. M. Hilton	5,258 10		
Amounts carried forward .	$71,522 60	$22,738 09	$412,946 21

Amounts brought forward .	$71,522 60	$22,738 09	$412,946 21
For land: —			
Edward Kendall and W. A. Bullard, Trustee . . .	21,314 88		
Thos. McMahon	1,087 50		
Robert M. Morse, Trustee	9,800 00		
Frederick H. Rindge . .	31,420 00		
Trustees of Solomon Sargent Estate	13,164 67		
Geo. Stephenson	2,500 00		
S. D. Warren and L. D. Brandeis, Trustees . .	10,625 00		
Francis H. Whitman, et al.	12,500 00		
Henry M. Whitney . . .	45,000 00		
Wm. L. Whitney . . .	4,586 50		
Edward Woodman . . .	264 00		
		223,785 15	
Lettering, Clifford Hunting		11 15	
Lawn grass, R. and J. Farquhar & Co.		12 75	
Lumber: —			
John S. Clary	7 35		
C. E. Dearborn	42		
Geo. W. Gale Lumber Co.	13 27		
A. W. Smith	15 00		
N. N. Stickney	1 80		
Wm. H. Wood & Co. . .	2 30		
		40 14	
Oil, Standard Oil Co. . . .		7 11	
Painting, J. D. Ford . . .		20 81	
Photos: —			
D. W. Butterfield . . .	28 50		
Whitney & Son	15 00		
		43 50	
Picket fence, John Quin . .		136 96	
Pipe and cement: —			
D. W. Lewis	3 78		
Portland Stone Ware Co.	148 52		
Sewer Department . . .	6 62		
		158 92	
Premium on policy, T. H. Raymond		40 00	
Recording deeds, Charles B. Stevens		43 79	
Amounts carried forward .		$247,038 37	$412,946 21

Amounts brought forward .		$247,038 37	$412,946 21
For sea wall, Henry M. Whitney		144 00	
Services of Engineering Dept.		1,005 76	
Serving notices, John M. Davis		6 18	
Sprinkling: —			
Barry St. George . . .	$4 05		
Robert Fawcett	8 10		
	——	12 15	
Stationery and printing: —			
American Bank Note Co.	135 00		
Cambridge Chronicle Co. .	9 00		
W. B. Clarke & Co. . . .	21 00		
Cotton & Gould	88 24		
Jas. H. Cox	61 25		
Harvard Printing Co. . .	98 92		
E. F. Hunt & Co. . . .	5 05		
E. W. S. Jones	8 90		
Smith Premier Typewriter Co.	15 40		
Stationery Department . .	28 89		
Thorp & Martin Co. . .	1 00		
L. F. Weston	7 00		
	———	479 65	
Stone: —			
Austin Ford & Son . . .	159 10		
Thos. O'Hara	2 50		
Chas. McMahon	45 31		
Street Department (Paving)	153 38		
	———	360 29	
Stone work, Austin Ford & Son		29 25	
Subscriptions: —			
Garden and Forest . . .	4 00		
Municipal Eng. Co. . . .	2 00		
	——	6 00	
Surveying instruments, Chas. C. Hutchinson		212 50	
Sundries: —			
F. D. Bartlett	4 50		
Geo. Davis	1 25		
O. F. Picott	2 00		
L. W. Poole	50		
	——	———	———
Amounts carried forward .	$8 25	$249,294 15	$412,946 21

Amounts brought forward .	$8 25	$249,294 15	$412,946 21
For sundries: —			
Geo. A. Merrill	4 00		
Savage & Son	1 70		
H. A. Scranton	1 00		
H. Sleap & Co.	4 00		
Eben Tucker	4 50		
Charles Waugh & Co. . .	4 10		
	——	27 55	
Teaming: —			
John J. Brassil	51 15		
Timothy Cosgrove . . .	13 50		
J. F. Coulter	20 63		
James Culhane	91 00		
John T. Culhane	34 88		
John Galvin	31 50		
Chas. Linehan	222 13		
Thos. O'Hara	102 75		
David O'Mara	46 00		
Dennis Shea	105 00		
Thos. H. O'Hara	55 50		
Timothy Murphy . . .	105 00		
	———	879 04	
Trees: —			
Andorra Nurseries . . .	158 50		
Evergreen Nurseries . .	82 50		
H. B. Goodenough . . .	134 50		
Hoover & Gaines Co. . .	24 00		
Jacob W. Manning . . .	69 50		
W. S. Little & Co. . . .	52 20		
Parsons & Son Co. . . .	172 00		
Shady Hill Nurseries . .	45 25		
	———	738 45	
Typewriting: —			
M. H. Aubin	5 00		
Geo. B. French	16 55		
	———	21 55	
Typewriter and cabinet, Smith Premier Typewriter Co.		113 50	
Wagon, Chas. Waugh & Co.		150 00	
Views, Suffolk Engraving Co.		35 00	
		———	
Total			$251,259 24
Balance unexpended . .			$161 686 97

SUMMARY OF EXPENDITURES.

Services of Supt. and Foremen	$1,652 39	
Engineers	1,005 76	
Clerks	275 55	
		$2,933 70
Labor		5,510 19
Advertising		33 87
Boats		388 50
Carriage hire and car tickets		128 50
Fence		136 96
Filling, loam and gravel		12,614 47
Furniture		295 40
Horses and wagons		638 20
Insurance		119 00
Lands	223,785 15	
Examination of titles	879 00	
Recording deeds	43 79	
		224,707 94
Sea-wall		144 00
Stationery and printing		479 65
Supplies		1,420 72
Teaming		891 19
Trees		738 45
Views		78 50
		$251,259 24

Park Department (Shade Trees and Public Grounds).

Appropriation	$7,000 00
Transferred from Street Department (Cleaning)	500 00
Transferred from Street Department (Collection of Ashes)	500 00
Surplus revenue	17 19
	$8,017 19

RECEIVED.

	$17 19

EXPENDED.

For salaries: —			
Foreman, James Doherty	$754 19		
Assistant Foreman, John Donnelly	721 87		
Labor, as per pay rolls	3,801 43		
		$5,277 49	
Amounts carried forward		$5,277 49	$8,017 19

Amounts brought forward .		$5,277 49	$8,017 19
For board and care of John Donnelly at Cambridge Hospital		21 45	
Board of horse, Street Dept.		70 00	
Carpentry, John Quin . . .		17 00	
Flag-staff repairs, David Cass		27 50	
Hardware and tools: —			
Ames Plow Co.	$251 78		
F. A. White	16 13		
		267 91	
Horse, Fire Department . .		50 00	
Horse shoeing, Street Dept. .		13 77	
Ladder, C. W. H. Moulton & Co.		4 00	
Loam		164 50	
Lumber: —			
Geo. W. Gale Lumber Co.	134 44		
Wm. H. Wood & Co. . .	31 44		
		165 88	
Old hose		4 50	
Poles, Coleman Bros. . . .		75 00	
Repairing fence, Chelmsford Foundry Co.		65 00	
Teaming: —			
J. T. Culhane	42 50		
John Gallivan	22 50		
Chas. Linehan	98 05		
Timothy Murphy . . .	13 50		
Thos. O'Hara	45 00		
T. H. O'Hara	17 25		
David O'Mara	27 13		
Dennis Shea	7 50		
M. J. Shea	37 50		
		310 93	
Trees and plants: —			
Wm. E. Doyle	115 00		
R. & J. Farquhar & Co. .	84 98		
Shady Hill Nurseries . .	123 53		
Jacob W. Manning . . .	138 50		
Reading Nursery . . .	19 91		
		481 92	
Total			$7,016 85
Balance unexpended . .			$1,000 34

SUMMARY OF EXPENDITURES.

Labor	$5,408 44
Horses and wagons	133 77
Loam	164 50
Lumber	240 88
Supplies	276 41
Teaming	310 93
Trees and plants	481 92
	$7,016 85

Park Department.

In account with the City of Cambridge for the year ending November 30, 1894.

RECEIPTS AND EXPENDITURES.

Revenue from sale of bonds	$360,000 00	Expended for Construction	$251,259 24
Premiums	26,454 00	Interest	7,200 00
Sales, rents, etc.	946 21	Balance carried forward	128,940 97
	$387,400 21		$387,400 21

Plumber's Examiner's Department.

Appropriation		$200 00

RECEIVED.

For licenses	$114 00	

EXPENDED.

For clerical assistance, H. M. Griffin	15 00	
Car tickets, W. E. St. Railway Co.	10 00	
Fees, John Crawford	80 00	
Stationery, Cotton & Gould	14 95	
Total		119 95
Balance unexpended		$80 05

Police Department.

Appropriation			$111,000 00
RECEIVED.			
For cloth	$478 58		
Court fees	1,933 05		
Fines	3,446 40		
Money paid for car tickets .	53 75		
Reduction of rate — Police Signal System	43 12		
	——	$5,954 90	
EXPENDED.			
For salaries: —			
Chief, L. J. Cloyes . . .	1,800 00		
Captains: —			
M. J. Folsom	1,248 00		
T. H. Lucy	1,248 00		
J. F. Murray	1,248 00		
Inspector, J. E. Murray . .	1,200 75		
Court officer, W. F. Batchelder	1,186 25		
Sergeants	8,040 50		
Patrolmen	83,472 24		
Drivers	3,259 10		
Matrons	730 00		
	———	103,432 84	
Atlas, G. W. Bromley & Co.		15 00	
Belts, H. A. Winship . . .		10 75	
Billies, Wm. F. Chester . .		10 00	
Buttons, D. Evans & Co. .		70 00	
Carriage hire: —			
Irving Blake	5 00		
Chas. W. Dailey	4 00		
	——	9 00	
Car tickets, W. E. Street Railway Co.		300 00	
Cash expended for sundries: —			
Dr. L. L. Bryant . . .	2 50		
L. J. Cloyes	36 30		
M. J. Folsom	20 50		
T. H. Lucy	51 00		
Jas. E. Murray	41 04		
Amounts carried forward .	$151 34	$103,847 59	$111,000 00

Amounts brought forward .	$151 34	$103,847 59	$111,000 00
For cash expended for sundries: —			
J. F. Murray	44 26		
F. B. Pullen	4 30		
		199 90	
Chevrons, Mrs. J. E. Marshall		6 75	
Cleaning carpets, W. A. Freeman		17 39	
Cleaning stations, Anna Freeman		120 00	
Clipping horses, John Smith		9 00	
Cloth for uniforms, Wendell, Fay & Co.		573 97	
Cooler, The N. Davis Co. .		28 00	
Devices, S. O. Aborn . . .		5 50	
Directories: —			
E. F. Hunt & Co. . . .	15 00		
Sampson, Murdock & Co. .	5 00		
		20 00	
Disinfectants, C. W. Lerned & Co.		12 50	
Expert, Melvin A. Priest .		15 00	
Expressage		8 30	
Firearms and repairs, Wm. Read & Sons		44 78	
Furniture and bedding: —			
Derby, Kilmer & Pond .	125 00		
Phillips Bros. & Co. . .	60 50		
M. E. Rideout & Co. . .	37 50		
A. W. Wheeler & Co. . .	26 80		
Sundry persons	17 50		
		267 30	
Hardware and supplies: —			
Brock Bros.	57 00		
Burditt & Bynner . . .	37 97		
D. W. Gage	9 70		
J. M. Price & Son . . .	21 87		
Sundry persons	5 30		
		131 84	
Harness and repairs: —			
Chas. E. Berry	7 00		
L. C. Chase & Co. . . .	8 30		
Amounts carried forward .	$15 30	$105,307 82	$111,000 00

Amounts brought forward .	$15 30	$105,307 82	$111,000 00
For harness and repairs: —			
Owen Doherty	13 20		
Sundry persons	3 25		
	——	31 75	
Hay and grain: —			
J. S. Bradeen	203 57		
A. G. Dore & Co. . . .	320 73		
Hosmer, Robinson & Co. .	194 04		
	———	718 34	
Horse board, Whiting & Smith		341 15	
Horse shoeing: —			
Wm. Balmer	59 00		
T. Burke	34 25		
Thomas Smith	39 00		
	———	132 25	
Ice: —			
Boston Ice Co.	11 25		
Fresh Pond Ice Co. . .	26 19		
	———	37 44	
Laundry work		9 10	
Lighting: —			
Camb. Elec. Light Co. . .	51 07		
Camb. Gas Light Co. . .	1,094 88		
Repairs	2 02		
	———	1,147 97	
Lighting apparatus and repairs: —			
John P. Adams	3 75		
Boston Gas Appliance Exchange	6 00		
Geo. F. Dickson	40 45		
N. A. T. Jones	9 00		
	———	59 20	
Medicines, etc.: —			
L. W. Reycroft	58 85		
Sundry persons	4 65		
	———	63 50	
Photographs, Geo. D. Ford .		11 00	
Police signal supplies: —			
N. E. Gamewell Co. . .	25 95		
Municipal Signal Co. . .	4 50		
	———	30 45	
Amounts carried forward .		$107,889 97	$111,000 00

Amounts brought forward .		$107,889 97	$111,000 00
For professional attendance: —			
Dr. A. August	$3 00		
Dr. P. J. Finnigan . . .	14 00		
Dr. P. M. Fitzsimmons .	3 00		
Dr. A. Moll	3 00		
Dr. G. H. Tuttle	3 00		
Dr. Chas. J. Walsh . . .	3 00		
Dr. R. Wetherbee . . .	6 00		
		35 00	
Rent of bicycle, W. T. McGuire		30 00	
Stationery and printing: —			
Cotton & Gould	131 37		
Harvard Printing Co. . .	100 10		
H. E. Lombard	18 00		
Poole Printing Co. . . .	24 00		
Pulsifer, Jordan & Co. .	100 71		
Stationery Department .	68 55		
Thorp & Martin Co. . .	112 53		
Sundry persons	8 00		
		563 26	
Sundries: —			
D. W. Hyde & Co. . . .	14 47		
M. R. Jouett & Co. . .	5 11		
J. C. Moor	20 62		
Yerxa & Yerxa	17 15		
Sundry persons	28 78		
		86 13	
Telephone, rent and tolls .		1,410 80	
Use of boat, E. M. Sanders .		6 00	
Wagons, repairs: —			
A. J. Jones	6 25		
Chas. Waugh & Co. . .	206 35		
		212 60	
Whips, Darling's Whip Manufactory		11 15	
Total			110,244 91
Balance unexpended . .			$755 09

SUMMARY OF EXPENDITURES.

Salaries	$103,432 84
Belts, buttons, billies, chevrons, and devices	103 00
Car tickets	300 00
Care of horses	482 40
Care of stations	337 29
Cloth for uniforms	573 97
Furniture and bedding	267 30
Hardware, etc.	207 07
Harness, etc.	42 90
Hay and grain	718 34
Lighting stations	1,207 17
Services of physicians and medicine	98 50
Stationery and printing	563 26
Sundries	257 47
Rent of bicycle	30 00
Telephone rent and tolls	1.410 80
Wagon repairs	212 60
	$110,244 91

Public Library Department.

Appropriation	$14,500 00
Surplus revenue	261 31
	$14,761 31

RECEIVED.

For catalogues and fines	$383 17	
Dog licenses for 1893	4,378 14	
		$4,761 31

EXPENDED.

For salaries of: —			
Librarian, Miss A. L. Hayward	$1,100 00		
Assistants	3,460 96		
Janitors: —			
A. J. Ayers	28 16		
Arthur Jewell	26 12		
T. M. Thomas	818 71		
		5,433 95	
Amounts carried forward		$5,433 95	$14,761 31

Amounts brought forward .		$5,433 95	$14,761 31
For atlas, G. W. Bromley & Co.		15 00	
Advertising: —			
Cambridge Chronicle Co.	$1 50		
James Cox	5 75		
F. S. Hill	30 75		
	———	38 00	
Baskets, Hopkinson & Marden		7 50	
Bindings: —			
E. W. Bettinson	530 61		
F. A. Bradley	5 00		
J. H. H. McNamee . . .	283 39		
	———	819 00	
Books and periodicals: —			
Amee Brothers	370 75		
D. Appleton & Co. . . .	28 89		
Balch Brothers	10 00		
T. H. Castor & Co. . . .	38 56		
N. R. Campbell & Co. . .	167 75		
W. B. Clarke & Co. . .	1,462 35		
Cupples & Patterson . .	5 15		
Estes & Lauriat	15 48		
Charlotte M. Harris . .	55 00		
F. P. Kurtz	17 00		
Geo. E. Littlefield . . .	85 50		
Little, Brown & Co. . .	1,703 56		
W. H. Lowdermilk & Co.	5 00		
Joel Munsell's Sons . .	10 00		
C. A. Nichols Co. . . .	18 00		
G. P. Putnam's Sons . .	10 00		
C. Schoenhof	24 18		
Theo. F. Wright . . .	15 25		
Sundry persons	14 11		
	———	4,056 53	
Carpentry, John Quin . .		63 65	
Cash expended: —			
A. L. Hayward	39 69		
Etta L. Russell	31 14		
	———	70 83	
Delivery of books and agencies: —			
W. B. Cade	380 07		
M. I. Dow	35 00		
Amounts carried forward .	$415 07	$10,504 46	$14,761 31

Amounts brought forward .	$415 07	$10,504 46	$14,761 31
For delivery of books and agencies: —			
W. J. Gallagher Estate .	70 83		
E. C. Gove	35 00		
H. M. Grant	35 00		
Jas. W. Hunnewell . . .	50 00		
L. W. Reycroft	29 16		
Edw. Thorndike	60 00		
		695 06	
Directory, W. A. Greenough & Co.		3 00	
Electric work, Bryant & Co.		6 78	
Expressage, Sawin's Express		25 65	
Fan Motor, Cambridge Electric Light Co.		32 00	
Fuel, Richardson & Bacon .		712 29	
Furniture and repairs: —			
Keeler & Co.	35 00		
Library Bureau	36 00		
Phillips Bros.	25 00		
M. F. Tracy & Son . . .	63 00		
Worcester Bros.	10 75		
		169 75	
Insurance: —			
H. Bird & Co.	180 00		
W. B. Hastings & Co. .	266 00		
		446 00	
Ice, Fresh Pond Ice Co. . .		20 90	
Lamps, Beacon Vacuum Pump and Electric Light Co.		50 00	
Lights: —			
Cambridge Electric Light Co.	815 06		
Cambridge Gas Light Co.	19 50		
		834 56	
Lettering boxes, A. J. Jones		8 00	
Lumber, M. F. Tracy & Son		23 23	
Plumbing: —			
Greene & Co.	43 05		
T. W. Haley	2 95		
		46 00	
Amounts carried forward .		$13,577 68	$14,761 31

Amounts brought forward .		$13,577 68	$14,761 31
For roof repairs: —			
E. B. Badger & Son . .	$96 80		
Wm. J. Griffiths	65 34		
		162 14	
Services: —			
Ellen M. Hinds	224 00		
Grace Reed	10 00		
C. E. Stewart	132 65		
		366 65	
Sign, J. E. Steffens . . .		8 00	
Stamps and repairs, H. C. Dimond & Co.		2 10	
Stationery and printing: —			
Amee Bros.	20 27		
Greenough, Adams & Cushing	149 62		
Hammond Typewriter Co.	15 71		
Harvard Printing Co. . .	10 43		
Library Bureau	64 74		
Stationery Department .	55		
Thorp & Martin Co. . .	5 75		
E. W. Wheeler	115 00		
W. H. Wheeler	184 45		
		566 52	
Supplies, hardware: —			
Burditt & Bynner . . .	11 56		
Greene & Co.	26 23		
		37 79	
Total			14,720 88
Balance unexpended . .			$40 43

SUMMARY OF EXPENDITURES.

Services of sundry persons .	$5,800 60
Advertising	38 00
Books, periodicals, etc. . .	4,893 53
Book delivery	695 06
Expressage	25 65
Fuel and lights	1,546 85
Furniture, etc.	201 75
Insurance	446 00
Repairs	309 80
Stationery and printing . .	566 52
Supplies	197 12
	$14,720 88

Public Library Building.

Appropriation			$20,000 00
EXPENDED.			
For labor as per pay rolls		$85 00	
Baskets, Wakefield Rattan Co.		4 00	
Building and contract, M. N. Stearns		12,285 00	
Carpentry, John Quin		126 95	
Door checks, A. J. Wilkinson & Co.		15 50	
Express, Savage & Son		2 10	
Fittings, S. C. Higgins		16 65	
Foundation for heating apparatus, S. C. Higgins		430 00	
Furniture and furnishings: —			
Derby, Kilmer & Pond	$165 00		
Jordan, Marsh & Co.	62 05		
Paine Furniture Co.	331 30		
M. F. Tracy & Son	300 25		
		858 60	
Grass, R. & J. Farquhar & Co.		3 25	
Globe, Boston School Supply Co.		35 00	
Gravel, John Gallivan		18 75	
Labor, Abram Wiener		4 00	
Loam, A. D. Rice		48 30	
Lighting apparatus, N. W. Turner Co.		207 45	
Mechanics' Ins. Permits: —			
H. Bird & Co.	50 00		
C. L. Fuller	117 50		
W. B. Hastings & Co.	21 00		
		188 50	
Mounting plans, Geo. Davis		3 50	
Picture wire, etc., W. W. Robertson		5 33	
Plans and specifications, Van Brunt & Howe		595 27	
Rubber goods, Boston Woven Hose Co.		102 99	
Amounts carried forward		$15,036 14	$20,000 00

Amounts brought forward .	$15,036 14	$20,000 00
For shades, W. W. Pratt . .	57 20	
Teaming, Chas. Linehan . .	44 85	
Wiring, F. Bryant & Co. .	9 75	
Wire mat, Morss & Whyte .	6 80	
Total		15,154 74
Balance unexpended . .		$4,845 26

Public Property (City Buildings, Care and Repair).

Appropriation		$21.000 00
Transferred from Sanitary Arrangements .	$550 00	
Surplus revenue	1,317 45	
		1,867 45
		$22,867 45

RECEIVED.

For rents:—		
Armories	$800 00	
District court room . . .	1,400 00	
Rooms, Old City Hall . .	117 45	
Water Works, office, etc. .	2,000 00	
		$4,317 45

EXPENDED.

For salaries of janitors . . .		9,735 91
Cash paid for labor, Geo. D. Brown		82 00
Expressage		1 45
Fuel:—		
Baker, Hunnewell Co. . .	$1,449 24	
L. G. Burnham & Co. . .	876 98	
P. F. Gayton & Co. . . .	20 20	
J. A. Heaton	593 05	
Wellington & Buck . . .	300 61	
Weighing coal, H. W. Brooks	10 40	
		3,250 48
Lights:—		
Cambridge Electric Light Co.	760 50	
Cambridge Gas Light Co.	984 49	
		1,744 99
Amounts carried forward .		$14,814 83 $22,867 45

Amounts brought forward .		$14,814 83	$22,867 45
For plans, C. H. McClare . .		13 53	
Removing night soil, R. M. Johnson		24 00	
Use of chairs, Worcester Bros.		10 00	
Repairs and alterations: —			
Carpentry: —			
John Barker	$16 56		
S. Chaplin & Co. . . .	95 49		
J. McDonald & Son . .	25 00		
W. H. Norris	1,105 81		
John Quin	148 12		
		1,390 98	
Cesspool repairs: —			
J. Delaney	3 25		
Samuel McCulloch . .	152 75		
		156 00	
Cleaning carpet, Geo. F. Ricker		20 39	
Clock repairs: —			
A. J. Applegate . . .	1 50		
John Gill	20 00		
J. P. Shurtleff	1 00		
		22 50	
Electrical repairs, F. Bryant & Co.		8 20	
Electric work, Inspection of Wires Department .		275 00	
Elevator repairs: —			
Whittier Machine Co. .	83 43		
Geo. F. Blake Mfg. Co. .	540 00		
		623 43	
Furniture repairs: —			
A. Alexander	5 00		
F. M. Eaton	17 00		
John H. Kelsey . . .	8 00		
Robart Bros.	14 00		
Sundry persons . . .	4 50		
		48 50	
Heating apparatus and repairs: —			
Geo. F. Blake Mfg. Co.	16 93		
Wm. Fitzgerald . . .	129 20		
Greene & Co.	273 05		
S. C. Higgins	292 18		
Amounts carried forward .	$711 36	$17,407 36	$22,867 45

Amounts brought forward .	$711 36	$17,407 36	$22,867 45
For heating apparatus and repairs: —			
Edw. Kendall & Sons . .	5 10		
S. C. Nightingale & Childs	69 50		
Sundry persons	7 06		
	——	793 02	
Lighting apparatus repairs: —			
Geo. F. Dickson	5 50		
Greene & Co.	13 23		
S. C. Higgins	14 40		
N. W. Turner Co. . . .	78 75		
	——	111 88	
Labor at bath-house: —			
F. Clover	12 00		
C. E. W. Lawson . . .	4 75		
	——	16 75	
Machine and iron work: —			
Chelmsford Foundry Co. .	5 20		
Sundry persons	8 50		
	——	13 70	
Masonry: —			
Thomas Leahy & Son . .	40 45		
N. E. Masonry Co. . . .	18 95		
M. N. Stearns	2 55		
	——	61 95	
Moving bath-house, David Cass		28 30	
Painting, glazing, etc.: —			
J. L. P. Ackers	683 74		
W. J. Edwards	142 89		
Wm. Holden	25 00		
Clifford Hunting	16 74		
Knox Bros.	7 00		
C. E. McMenimen . . .	10 50		
J. H. & J. P. Thayer & Co.	18 50		
Chas. A. Sawyer	93 00		
J. J. Shedd	69 08		
Sundry persons	6 45		
	——	1,072 90	
Paving, Patrick Powers . .		36 41	
Plastering: —			
J. W. Crocker	27 00		
Wm. Kelley	2 50		
	——	29 50	
Amounts carried forward .		$19,571 77	$22,867 45

Amounts brought forward .		$19,571 77	$22,867 45
For plumbing: —			
Ernest W. Clark	$38 15		
M. F. Davlin & Co. . .	27 34		
Geo. V. Eldridge . . .	14 05		
H. L. Rose	329 23		
Sundry persons	4 22		
		412 99	
Roof repairs: —			
John J. Blevins	72 38		
David Young	34 38		
		106 76	
Repairing fence, A. J. Jones		1 50	
Repairing bulkhead, James Maitland		2 50	
Relettering tablet, Alex McDonald & Son		75 00	
Supplies: —			
Awnings, Jas. Martin & Son		110 00	
Brushes, brooms: —			
Chas. A. Austin & Co .	1 75		
A. Worcester & Sons .	34 00		
		35 75	
Cellar gratings, Morss & Whyte		50 00	
Cotton waste, L. W. Ferdinand & Co.		9 44	
Furniture and furnishings: —			
H. H. Cotton & Co. . .	33 00		
C. F. Davis	11 70		
Derby, Kilmer & Pond .	188 40		
Geo. L. Foster . . .	5 00		
James Furley	27 67		
John Gill	5 00		
Harwood Mfg. Co. . .	295 00		
D. W. Hyde & Co. . .	20 00		
Keeler & Co.	40 00		
Paine's Furniture Co. .	330 25		
Phillips Bros. & Co. . .	126 00		
W. W. Pratt	51 00		
Geo. H. Richter & Co. .	145 40		
Rourke & Kennedy . .	35 00		
Rourke & Moules . .	61 25		
Amounts carried forward .	$1,374 67	$20,375 71	$22,867 45

Amounts brought forward .	$1,374 67	$20,375 71	$22,867 45
For furniture and furnishings: —			
Worcester Bros.	63 70		
	———	1,438 37	
Gaskets, Boston Woven Hose Co.		11 30	
Hardware, tools, etc.: —			
C. L. Bradlee	6 40		
Brock Bros.	11 35		
Burditt & Bynner . . .	34 00		
C. Callahan Co.	20 00		
J. D. Jewett	5 76		
W. I. Mabie	17 95		
E. Morris	9 85		
Sundry persons	6 28		
F. A. White	90 64		
J. D. Wild & Co.. . . .	14 03		
	———	216 26	
Ice, Fresh Pond Ice Co. . .		73 25	
Lighting apparatus: —			
Beacon Vacuum Pump Co.	52 85		
N. W. Turner Co. . . .	16 75		
	———	69 60	
Lumber: —			
John Barker	9 61		
Geo. W. Gale Lumber Co.	1 80		
Sewell, Adams & Co. . .	28 26		
M. F. Tracy & Son . . .	6 95		
	———	46 62	
Metallic vault fittings, Fenton Metallic Co.		125 00	
Oil: —			
E. Morris	59 00		
W. A. Morrison	42 81		
	———	101 81	
Savogram, India Alkali Works		16 64	
Soap: —			
Frank H. Teele	16 12		
Torrey & Bentley Co. . .	10 50		
	———	26 62	
Spring chests, C. Callahan Co.		14 00	
Amounts carried forward .		$22,515 18	$22,867 45

Amounts brought forward .		$22,515 18	$22,867 45
For supplies: —			
Cotton & Gould	$12 00		
D. H. Dean	7 50		
Diamond Match Co. . .	10 50		
D. W. Hyde & Co. . . .	9 88		
Lubron Mfg. Co. . . .	26 41		
Chas. Munroe	37 23		
Pettingell, Andrews Co. .	9 45		
Sundry persons	11 10		
		124 07	
Total			22,639 25
Balance unexpended . . .			$228 20

SUMMARY OF EXPENDITURES.

Janitors	$9,817 91
Fuel	3,250 48
Lights	1,744 99
Plans	13 53
Repairs and alterations . .	5,308 16
Supplies	2,504 18
	$22,639 25

Public Property (Incidentals).

Appropriation	$4,800 00
Transferred from P. P. Sanitary Arrangements, Schools .	87 22
	$4,887 22

EXPENDED.

For salaries: —			
Superintendent of Buildings, Benj. H. Steele .	$1,750 00		
Inspector of Buildings, Jas. Richardson	786 55		
Inspector of Buildings, Wm. H. Gray	207 75		
Inspector of Plumbing, Wm. A. Ford	955 77		
Clerk, E. W. Pike . . .	208 64		
		$3,908 71	
Amounts carried forward		$3,908 71	$4,887 22

Amounts brought forward .		$3,908 71	$4,887 22
For advertising, James Cox .		3 28	
Atlas, G. W. Bromley & Co.		15 00	
Board of horse, G. D. Merrill & Co.		301 75	
Care and repairs of tower clocks		140 20	
Carriage hire for committee:—			
J. Callahan	$8 00		
J. E. Fabyan	8 00		
Aaron Hale	60 00		
Lake & Moynahan . . .	8 00		
M. J. Shea	8 00		
		92 00	
Car tickets, W. E. Street Railway Co.		70 00	
Directory, E. F. Hunt & Co.		3 00	
Ensign, I. W. Wheeler & Co.		24 87	
Harness repairs		8 75	
Horse shoeing		25 13	
Horse, Lake & Moynahan .		125 00	
Refreshments, M. R. Jones .		15 00	
Rent of Rifle Range, Josephine E. Stone		60 00	
Stationery and printing:—			
Cotton & Gould	27 87		
Jas. H. Cox	8 50		
Crocker & Scott	19 00		
Harvard Printing Co. . .	9 81		
L. F. Weston	22 50		
Sundry persons	6 85		
		94 53	
Total			4,887 22

Public Property (Land for Engine House, Ward Five).

Appropriation	$6,000 00
EXPENDED.	
For land, Albert F. Hayward	6,000 00

Public Property (Land for School House, Ward Three).

Appropriation	$7,000 00
EXPENDED.	
For land, Solomon A. Woods	7,000 00

Public Property (Land for Latin School House).

Appropriation			$45,000 00
EXPENDED.			
For land, Frederick H. Rindge			43,911 45
Balance unexpended			$1,088 55

Public Property (New Engine House, Ward One).

Appropriation			$6,858 58
EXPENDED.			
For labor as per pay rolls		$248 25	
Architect's services, W. A. Norris		83 24	
Building contract, John McDonald & Son		5,171 64	
Carpentry: —			
S. Chaplin	$156 35		
W. H. Norris	75 00		
M. F. Tracy & Son	8 00		
G. H. Woll	23 00		
		262 35	
Electrical work, F. Bryant & Co.		6 00	
Flagging, Austin Ford & Son		32 04	
Grading, Dennis Shea		21 00	
Gravel, John Gallivan		82 80	
Hardware: —			
S. C. Higgins	1 84		
J. D. Jewett	144 45		
Morss & Whyte	3 75		
		150 04	
Heating apparatus, Greene & Co.		520 00	
Paving, Street Department		157 48	
Service pipe, Cambridge Gas Light Co.		10 36	
Sod, Park Department		29 13	
Tinning walls, Howard F. Peak		15 00	
Teaming, Dennis Shea		31 50	
Total			6,820 83
Balance unexpended			$37 75

Public Property (New Engine House, Ward Two).

Appropriation		$19,000 00
EXPENDED.		
For labor as per pay rolls . .	$98 40	
Advertising, James Cox . .	76	
Building contract, John H. Laskey	6,500 00	
Drain work, Samuel McCulloch	26 00	
Hose, etc., Boston Woven Hose Co.	3 00	
Plans, Fitzgerald & Mitchell	350 00	
Repairs, Cambridge Gas Light Co.	9 60	
Total		6,987 76
Balance unexpended . .		$12,012 24

Public Property (New Engine House, Ward Four).

Appropriation		$11,636 69
EXPENDED.		
For building contract, John McDonald & Son . . .	$10,925 33	
Extra work	276 80	
Carpentry, S. Chaplin. . .	41 00	
Copper signs, S. D. Hicks & Son	60 00	
Expressage, American Express Co.	1 75	
Gas and electric fixtures, N. W. Turner & Co. . . .	161 10	
Hose washer, Chas. S. Hibbert	80 00	
Oiling floors, J. L. P. Ackers	42 80	
Service pipe and connecting meter, Cambridge Gas Light Co.	9 04	
Supply pipe, Cambridge Water Works	35 09	
Total		11,632 91
Balance unexpended . .		$3 78

Public Property (New Engine House and Land, Ward Three).

Appropriation	$31,000 00

EXPENDED.

For land, Mullins Heirs and A. Broderick	$13,500 00
Balance unexpended	$17,500 00

Public Property (New School House, Ward Two).

Appropriation	$3,832 65
Additional appropriation	2,000 00
	$5,832 65

EXPENDED.

For building contract: —		
Briggs Bros.	$3,748 50	
Sedley Chaplin	521 25	
		$4,269 75
Blackboards: —		
J. L. Hammett	35 50	
J. A. Swasey	37 00	
		72 50
Carpentry: —		
Briggs Bros.	27 50	
S. Chaplin & Co.	173 75	
		201 25
Connecting meter, Cambridge Gas Light Co.		3 72
Furniture and furnishings: —		
Geo. S. Perry & Co.	279 40	
W. W. Pratt	22 15	
James Furfey	10 36	
		311 91
Heating apparatus, S. C. Higgins		570 00
Mason work, A. Chapin		27 50
Painting and glazing, J. L. P. Ackers		13 94
Plumbing: —		
A. Baumeister	52 16	
H. L. Rose	288 14	
		340 30
Total		$5,810 87
Balance unexpended		$21 78

Public Property (New School House and Land, Ward Five).

Appropriation		$29,256 80
EXPENDED.		
For advertising, James Cox	$1 35	
Contract, Wm. I. Mabie	3,745 31	
Land, Clarence G. Reed	4,256 80	
Plans, C. H. McClare	300 00	
Total		8,303 46
Balance unexpended		$20,953 34

Public Property (Sanitary Arrangements).

Appropriation		$6,500 00
Transferred to Public Property (City Buildings, Care and Repairs)	$550 00	
Transferred to Public Property (Election Expenses)	306 92	
Transferred to Public Property (Incidental Expenses)	87 22	
Transferred to Public Property (School Houses, Care and Repairs)	1,136 27	
		2,080 41
		$4,419 59
EXPENDED.		
For carpentry: —		
S. Chaplin & Co. $409 40		
W. H. Norris 366 03		
	$775 43	
Plumbing: —		
Geo. V. Eldridge 10 00		
H. L. Rose 1,473 45		
	1,483 45	
Removing night soil, R. M. Johnson	4 00	
Sanitary work, Herbert L. Rose	1,813 67	
Whitewashing, Thos. Leahy & Son	16 00	
Ventilating apparatus, S. C. Higgins	200 00	
Total		4,292 55
Balance unexpended		$127 04

Public Property (School Houses, Care and Repairs).

Appropriation	$45,000 00
Transferred from Public Property (Sanitary Arrangements)	1,136 27
	$46,136 27

EXPENDED.

For salaries of janitors		$21,670 61	
Expressage and teaming: —			
Bancroft's Express	$2 40		
H. W. Bettinson	1 65		
P. Biggin	17 12		
Derby, Kilmer & Pond	1 50		
J. R. & C. S. Hersum	47 25		
Savage & Son	2 04		
		71 96	
Fuel: —			
Baker, Hunnewell Co.	1,627 03		
L. G. Burnham & Co.	8,283 69		
Coleman Bros.	40 02		
P. F. Gayton & Co.	170 50		
J. A. Heaton	82 81		
Wellington & Buck	532 10		
H. Wellington & Co.	10 25		
		10,746 40	
Weighing, H. W. Brooks		96 65	
Lighting: —			
Camb. Electric Light Co.	502 05		
Cambridge Gas Light Co.	463 06		
Repairs	11 52		
		976 63	
Removing night soil, R. M. Johnson		32 00	
Rent: —			
Bancroft & Griffin	312 50		
Martin Murphy	90 00		
J. F. O'Brien	150 00		
		552 50	
Repairs and alterations: —			
Boiler repairs, Edw. Kendall & Sons		162 47	
Carpentry: —			
S. Chaplin	23 86		
Amounts carried forward	$23 86	$34,309 22	$46,136 27

Amounts carried forward .	$23 86	$34,309 22	$46,136 27
For carpentry: —			
I. P. Estes	23 80		
W. H. Norris	2,527 09		
John Quin	211 04		
W. H. White	40 00		
		2,825 79	
Clock repairs: —			
A. J. Applegate	59 00		
F. A. Colburn	4 50		
Simon Flaig	33 50		
Jas. W. Marshea . . .	1 00		
T. F. McCue	4 00		
J. A. Rice	3 25		
J. P. Shurtleff	1 00		
		106 25	
Drain repairs: —			
Levi Hawkes	6 32		
Samuel McCulloch . . .	37 40		
		43 72	
Electrical repairs, F. Bryant & Co.		2 50	
Flag and flag-pole repairs: —			
H. R. Dyer	3 26		
Wm. C. Pierce	10 00		
N. C. Littlefield	1 75		
		15 01	
Furniture repairs: —			
F. M. Eaton	30 60		
Annie Freeman	2 00		
Margaret Kidd	60		
Jas. Major	1 00		
Phillips Bros. & Co. . .	2 00		
T. B. Wentworth . . .	100 50		
		136 70	
Gong repairs, F. M. Buffum .		16 20	
Heating and ventilating apparatus repairs: —			
Wm. F. Chester	78 00		
Wm. Fitzgerald	165 54		
Greene & Co.	291 21		
S. C. Higgins	1,501 32		
C. K. Hooker.	10 40		
Amounts carried forward .	$2,046 47	$37,455 39	$46,136 27

Amounts brought forward .	$2,046 47	$37,455 39	$46,136 27
For heating and ventilating apparatus repairs: —			
Moore & Rieker . . .	342 00		
Moynahan & Co. . . .	76 16		
Underhill Warming and Ventilating Co. . . .	51 15		
D. J. Wild & Co. . . .	150 25		
		2,666 03	
Lighting apparatus repairs: —			
M. F. Davlin & Co. . .	6 53		
Geo. F. Dickson . . .	38 69		
Pettingell-Andrews Co. .	20 15		
		65 37	
Mason work: —			
A. Chapin	107 50		
Samuel Sennott	6 57		
		114 07	
Plastering, J. W. Crocker .		15 00	
Painting, glazing, etc.: —			
J. L. P. Aekers	771 86		
Patriek Cronin	90		
R. W. Davis	4 50		
W. J. Edwards	251 25		
P. Fitzgerald	1 40		
Wm. Holden	45 00		
Timothy Horan	3 75		
W. B. Holt	156 06		
C. E. MeMenimen . . .	21 25		
Chas. A. Sawyer . . .	373 12		
J. J. Shedd	69 65		
J. H. & J. P. Thayer & Co.	59 77		
Francis Traynor	5 15		
F. H. Tufts	5 50		
		1,769 16	
Plumbing: —			
M. F. Davlin & Co. . .	18 24		
G. T. Durgin	7 30		
Geo. V. Eldridge . . .	22 50		
D. W. Gage	4 60		
Levi Hawkes	12 44		
Henry T. Moulton . . .	9 66		
Amounts carried forward .	$74 74	$42,085 02	$46,136 27

Amounts brought forward .	$74 74	$42,085 02	$46,136 27
For plumbing:—			
H. L. Rose	264 73		
D. J. Wild & Co. . . .	41 25		
		380 72	
Roof repairs:—			
J. J. Blevins	222 85		
M. F. Marks	19 20		
		242 05	
Stone work, Alex. McDonald & Son		25 00	
Sundry repairs:—			
Wm. Hunnewell	2 00		
C. E. W. Lawson . . .	1 87		
G. H. & P. J. Lambert .	5 00		
T. F. McCue	8 32		
Wm. H. White	108 99		
		126 18	
Tool repairs:—			
A. J. Jones	3 38		
John Lane	1 00		
James Maitland	2 10		
Chas. Waugh & Co. . .	50		
		6 98	
Wiring, inspection of wires .		62 21	
Supplies:—			
Blackboards:—			
J. L. Hammett . . .	45 60		
J. A. Swasey	146 21		
		191 81	
Clocks, A. J. Applegate .		10 00	
Disinfectant:—			
Boston Germicide Co. .	45 90		
C. W. Lerned & Co. .	132 50		
		178 40	
Drawing boards, Frost & Adams		222 75	
Dusters, brushes, brooms, etc.:—			
Chas. A. Austin & Co. .	82 96		
Dover Stamping Co. .	6 00		
F. M. Eaton	74 50		
A. Worcester & Sons .	144 42		
		307 88	
Furniture and furnishings:—			
Jas. Furfey	285 27		
Harwood Mfg. Co. . .	100 64		
Amounts carried forward . .	$385 91	$43,839 00	$46,136 27

Amounts brought forward .	$385 91	$43,839 00	$46,136 27
For furniture and furnishings: —			
Heywood Bros. & Co. . .	13 50		
John H. Kelsey	2 00		
Geo. S. Perry & Co. . .	743 83		
W. W. Pratt	268 75		
Phillips Bros. & Co. . .	43 50		
Ward 5 Day Nursery . .	20 00		
Worcester Bros.	18 63		
		1,496 12	
Hardware, tools, and supplies: —			
C. L. Bradlee	8 70		
Brock Bros.	14 06		
Burditt & Bynner . . .	66 91		
Chandler & Farquhar . .	7 67		
Cambridge Hardware Co.	2 75		
Cotton & Gould	22 00		
J. D. Jewett	1 50		
R. Josselyn	10 50		
J. M. Price & Son . . .	202 11		
F. A. White	102 45		
D. J. Wild & Co. . . .	2 70		
		441 35	
Hose, Boston Woven Hose Co.		42 60	
Labor and materials for Kindergarten, Concord Ave., John F. O'Brien .		13 00	
Lighting apparatus: —			
Beacon Vacuum Pump & Electric Co.	68 20		
Pettingell Andrews Co.	57 79		
N. W. Turner Co. . . .	141 23		
		267 22	
Sundries: —			
A. F. Chadwick	9 10		
F. Clover	7 30		
H. N. Hovey & Co. . .	1 10		
D. W. Hyde & Co. . . .	81		
Jordan, Marsh & Co. . .	5 62		
J. S. Kenney	15		
C. W. H. Moulton & Co.	2 40		
		26 48	
Waste baskets, Cotton & Gould		10 50	
Total			$46,136 27

SUMMARY OF EXPENDITURES.

Services of janitors	$21,670 61
Expressage	71 96
Fuel	10,843 05
Lights	976 63
Rent	552 50
Repairs and alterations	8,813 41
Supplies	3,208 11
	$46,136 27

School Department (Incidentals).

Appropriation			$1,350 00
Transferred from incidental expenses			178 13
			$1,528 13

EXPENDED.

For salaries:—			
Secretary, S. B. Hubbard	$300 00		
Page, Chas. M. Jones	15 00		
		$315 00	
Advertising		22 56	
Car tickets, W. E. Street Railway Co.		130 00	
Cash expended for statistics, S. B. Hubbard		6 00	
High School graduating exercises:—			
Music F. E. Chapman	36 00		
Sanders Theatre, Harvard University, gas, janitor, etc.	15 13		
Services, A. K. Jones	3 00		
		54 13	
Photographs		2 25	
Stationery and printing:—			
James Cox	26 75		
Harvard Printing Co.	253 00		
Sundry persons	4 00		
		283 75	
Transportation, W. E. Street Railway Co.		681 50	
Travelling expenses, Francis Cogswell		9 74	
Amounts carried forward		$1,504 93	$1,528 13

Amounts brought forward .		$1,504 93	$1,528 13
For vaccine virus, Dr. L. L. Bryant		23 20	
Total			1,528 13

School Department (Salaries).

Appropriation			$230,000 00
Transferred from interest			4,000 00
			$234,000 00

RECEIVED.

For income from Hopkins' Fund	$745 84		
Tuition of non-resident pupils	1,001 25		
		$1,747 09	

EXPENDED.

For salaries: —			
Superintendent, Francis Cogswell		3,000 00	
Supt's clerk, Althea B. Frost .		600 00	
Agent, S. B. Hubbard . .		1,800 00	
Special instructors: —			
Botany, Sarah E. Brassill .	$495 00		
Drawing: —			
James M. Stone . . .	1,700 00		
Lucia N. Jennison . .	800 00		
Gymnastics: —			
Clara E. Shepard . . .	225 00		
Sarah J. Jacobs . . .	215 00		
Music, Frederick E. Chapman	1,860 00		
Primary Department, Lelia B. Mirick	900 00		
Sewing: —			
Agnes Gordon	600 00		
Alice H. Nay	600 00		
Sarah J. Stanton . . .	200 00		
		7,595 00	
Teachers in			
Latin School	14,359 66		
English High School . .	23,051 00		
Amounts carried forward .	$37,410 66	$12,995 00	$234,000 00

Amounts brought forward .	$37,410 66	$12,995 00	$234,000 00
For salaries of teachers in			
Grammar schools . . .	93,574 60		
Primary schools	62,547 40		
Wellington Training School	11,068 00		
Kindergarten schools . .	7,384 82		
		211,985 48	
Substitutes		493 00	
Teachers in evening schools: —			
Drawing	1,175 00		
High	1,396 00		
Allston	644 00		
Putnam	1,017 50		
Shepard	124 00		
Webster	507 50		
		4,864 00	
Truant officers		3,400 00	
Total			233,737 48
Balance unexpended . .			$262 52

School Department (Text Books and Supplies).

Appropriation	$13,000 00

RECEIVED.

For sale of and damages to books	$246 34

EXPENDED.

For apparatus and supplies: —		
Boston School Supply Co. .	$17 60	
Brown, Durrell & Co. . .	51 19	
Burditt & Williams . . .	7 60	
Davidson Rubber Co. . .	37 80	
Eimer & Amend . . .	351 84	
Frost & Adams	251 93	
Greenough, Adams & Cushing	994 33	
J. L. Hammett	108 61	
G. F. King & Merrill . .	112 04	
Geo. S. Perry & Co. . .	190 10	
Prang Ed. Co.	369 69	
Pulsifer, Jordan & Co. .	1,561 62	
Queen & Co.	123 59	
Geo. H. Richter & Co. . .	14 40	
Amounts carried forward .	$4,192 34	$13,000 00

Amounts brought forward .	$4,192 34		$13,000 00
For apparatus and supplies: —			
Thorp & Martin Co. . .	16 50		
Weeks & Potter Co. . .	42 18		
Sundry persons	21 96		
		$4,272 98	
Binding books, J. H. H. McNamee		258 37	
Books: —			
American Book Co. . .	1,151 03		
T. H. Castor & Co. . . .	258 93		
DeWolfe, Fiske & Co. . .	23 04		
Ginn & Co.	2,081 92		
Thos. Groom & Co. . .	152 00		
J. L. Hammett	84 38		
D. C. Heath & Co. . . .	149 54		
Houghton, Mifflin & Co. .	143 71		
Leach, Shewell & Sanborn	436 45		
Lee & Shepard	77 28		
Longmans, Green & Co. .	67 20		
Lothrop Publishing Co. .	60 00		
Prang Ed. Co.	473 07		
Carl Schoenhof	29 04		
Willard Small	48 47		
Thompson, Brown & Co. .	1,645 45		
University Publishing Co. .	24 96		
Wm. Ware & Co. . . .	304 18		
Sundry persons	28 17		
		7,238 82	
Boxes, etc., Chas. Place . .		37 20	
Cash expended for sundries:—			
S. B. Hubbard	16 18		
C. W. Parmenter . . .	9 48		
Emma A. Scudder . . .	8 27		
Delia Stickney	2 13		
Chas. F. Warner . . .	13 65		
		49 71	
Diplomas, Boston Bank Note and Lithographing Co. . .		164 38	
Expressage: —			
American Express Co. . .	11 95		
Bancroft's Express . . .	11 05		
H. W. Bettinson & Co. .	17 80		
Amounts carried forward	$40 80	$12,021 46	$13,000 00

Amounts brought forward .	$40 80	$12,021 46	$13,000 00
For expressage: —			
P. Biggin	77 25		
W. A. Nichols	66 95		
Sawin's Express	30 59		
Sundry persons	7 75		
		223 34	
Eyelet press, C. G. Hurburt		5 00	
Filling diplomas		4 00	
Music, Oliver Ditson Co. . .		55 01	
Photographs		2 50	
Piano, Chickering & Sons .		300 00	
Printing: —			
Harvard Printing Co. . .	191 66		
G. B. Lenfest	45 65		
T. W. Ripley	6 00		
Louis F. Weston . . .	89 00		
		332 31	
Repairing camera, Horgan, Robey & Co.		6 02	
Shade and hanging, H. H. Cotton & Co.		8 50	
Subscription, N. E. Publishing Co.		8 85	
Thermometer, S. Thaxter & Son		20 00	
Tuning pianos: —			
Orrin D. Howlett . . .	8 00		
Bentley L. Rice	4 50		
		12 50	
Total			12,999 49
Balance unexpended . .			51

Sealer of Weights and Measures.

Appropriation			1,600 00
RECEIVED.			
For fees for sealing	$322 67		
Weighing	179 76		
		$502 43	
Amount carried forward .			$1,600 00

Amount brought forward .			$1,600 00
EXPENDED.			
For salaries: —			
Sealer, A. F. Roberts . .	$875 00		
Assistant, C. D. Kinnear .	170 00		
		$1,045 00	
Advertising, James Cox . .		3 33	
Board of horse, G. D. Merrill & Co.		304 00	
Car tickets, W. E. Street Railway Co.		10 00	
Hardware		4 70	
Harness and carriage repairs: —			
F. Ivers & Son	3 00		
Nelson Carriage Co. . .	12 50		
		15 50	
Horse shoeing: —			
J. W. Gerry	13 50		
Gerry & Rufer	6 00		
		19 50	
Painting, J. J. Shedd . . .		7 75	
Printing: —			
Cambridge Chronicle Co. .	4 50		
Harvard Printing Co. . .	7 12		
F. W. Nash	6 00		
		17 62	
Stamps, Geo. B. Sargent & Son		12 00	
Stationery		5 40	
Wagon, E. Emerton . . .		70 00	
Weighing fees: —			
T. Gurnham	23 23		
T. Sullivan	52 59		
E. I. Train	8 33		
		84 15	
Total			1,598 95
Balance unexpended . .			1 05

Sewer Department (Construction).

Appropriation	23,000 00
Transferred to Sewer Department (Maintenance) . .	5,000 00
Amount carried forward	$18,000 00

Amount brought forward . .			$18,000 00
	RECEIVED.		
For permits to connect with sewers	$388 15		
Sewer assessments	6,427 68		
		$6,815 83	
	EXPENDED.		
For labor as per pay rolls . .		9,449 20	
Bricks: —			
Chas. McMahon	$565 70		
Parry Bros. & Co. . . .	383 40		
		949 10	
Castings, Mechanics' Iron Foundry		240 24	
Catch basin covers: —			
Barbour, Stockwell & Co.	63 00		
John J. Cuddihy . . .	267 29		
Austin Ford & Son . . .	269 75		
Sweatt & Gould	270 00		
		870 04	
Cement, Waldo Bros. . .		479 45	
Fuel, Coleman Bros. . . .		16 00	
Gravel: —			
Chas. Linehan	120 60		
John T. Scully	57 00		
		177 60	
Hardware and supplies: —			
Burditt & Bynner . . .	25 73		
Sundry persons	4 55		
		30 28	
Labor and materials, W. E. Street Railway Co. . . .		75 26	
Lumber: —			
J. H. Keenan	22 90		
E. D. Sawyer & Co. . .	236 77		
		259 67	
Piles, John T. Scully . . .		367 41	
Pipe: —			
Greene & Co.	28 13		
D. W. Lewis	18 00		
Portland Stone Ware Co. .	2,202 00		
		2,248 13	
Repairing tools, Wight & Scorgie		23 59	
Amounts carried forward .		$15,185 97	$18,000 00

Amounts brought forward .		$15,185 97	$18,000 00
For sand, Peter Tumilty . .		14 00	
Stone, John J. Cuddihy . .		39 00	
Stone cutting: —			
John J. Cuddihy . . .	$90 00		
Austin Ford & Son . . .	26 75		
		116 75	
Teaming: —			
P. Biggin	43 63		
Thos. O'Hara	603 50		
		647 13	
Traps: —			
Boston Double Catch Basin, Sewer, and House Trap Co.	154 50		
Coleman Sewer Trap Co. .	30 00		
		184 50	
Total			16,187 35
Balance unexpended . .			$1,812 65

SUMMARY OF EXPENDITURES.

Labor	$9,664 80
Teaming	647 13
Supplies	5,875 42
	$16,187 35

Sewer Department (Maintenance).

Appropriation	$18,000 00
Transferred from Sewer Department (Construction) .	5,000 00
	$23,000 00

RECEIVED.

From City of Somerville, for a portion of the expense of cleaning the outlet to the Bridge Street Sewer . . .	$2,402 03		
For catch basins	54 46		
Labor and materials . . .	182 96		
Rent of house	108 00		
Sundries	4 97		
		$2,752 42	
Amount carried forward .			$23,000 00

Amount brought forward .			$23,000 00
	EXPENDED.		
For salaries: —			
Superintendent, T. L. Pike	$1,700 00		
Clerk, Mary E. Rowen .	311 00		
Laborers, as per pay rolls .	5,972 37		
		$7,983 37	
Advertising: —			
Boston Herald Co. . . .	7 63		
James Cox	1 24		
		8 87	
Bricks: —			
Chas. McMahon	94 79		
Parry Bros. & Co. . . .	49 50		
		144 29	
Brooms, C. W. Carman . .		11 00	
Car tickets, W. E. Street Railway Co.		55 00	
Castings: —			
Barbour, Stockwell & Co.	14 32		
Mechanics' Iron Foundry .	6 36		
		20 68	
Canvas covers and chains, Nolan Bros.		73 82	
Cement, Waldo Bros. . . .		168 00	
Cleaning catch basins, John Horrigan		2,068 50	
Dredging outlet to Bridge St. Sewer, Boynton Bros. . .		4,108 24	
Drain work, Samuel McCulloch		25 38	
Fuel: —			
Baker, Hunnewell Co. . .	11 76		
Coleman Bros.	11 90		
		23 66	
Gas, Cambridge Gas Light Co.		20 28	
Gravel: —			
Chas. Linehan	27 00		
John T. Scully	18 00		
		45 00	
Hardware, tools, and supplies: —			
Burditt & Bynner . . .	454 27		
H. A. Scranton	85 88		
Amounts carried forward .	$540 15	$14,756 09	$23,000 00

Amounts brought forward .	$540 15	$14,756 09	$23,000 00
For hardware, tools and supplies: —			
Whittier Hardware Co. .	58 55		
Sundry persons	4 75		
		603 45	
Harness and repairs, John Hancock		13 60	
Hay, grain, and straw: —			
E. R. Luke & Co. . . .	362 04		
David O'Mara	2 65		
		364 69	
Horse shoeing, J. F. Gurry .		110 03	
Iron work, Miller & Shaw .		190 46	
Lanterns, A. H. Hews & Co.		30 00	
Labor and materials, Street Department (Paving) . .		28 50	
Lumber: —			
Geo. McQuesten & Co. .	2 10		
E. D. Sawyer & Co. . .	73 66		
		75 76	
Oat meal, Chas. James . .		14 53	
Oil, Standard Oil Co. . . .		39 98	
Oil clothing, H. M. Sawyer & Co.		29 50	
Patterns, Walter F. Norman		9 58	
Pipe: —			
D. W. Lewis	15 43		
Portland Stoneware Co. .	602 05		
		617 48	
Printing and stationery: —			
Cotton & Gould	21 25		
James H. Cox	9 50		
Harvard Printing Co. . .	3 00		
		33 75	
Rent of land, I. L. Russell .		25 00	
Repairing rubber boots, J. H. Peters		8 75	
Repairing tools: —			
C. H. Goldsmith	47 40		
James Maitland	140 24		
		187 64	
Rope and packing, M. F. Whiton & Co.		37 54	
Amounts carried forward . .		$17,176 33	$23,000 00

Amounts brought forward .		$17,176 33	$23,000 00
For rubber goods, hose, etc.: —			
American Rubber Co. . .	$79 44		
Boston Woven Hose Co. .	99 21		
Conant Rubber Co. . . .	138 84		
Edson Mfg. Co.	26 84		
		344 33	
Sand, Thos. O'Hara . . .		12 00	
Sand dryer, Wm. Campbell & Co.		35 00	
Stone, Austin Ford & Son .		5 00	
Sundries		12 30	
Teaming: —			
P. Biggin	18 50		
Thos. O'Hara	234 12		
		252 62	
Traps, Boston Double Catch Basin, Sewer, and House Trap Co.		51 50	
Use of engine, etc., Boston & Maine R. R. Co. . . .		169 15	
Total			18,058 23
Balance unexpended . .			$4,941 77

SUMMARY OF EXPENDITURES.

Advertising	$8 87
Care of horses	488 32
Car tickets	55 00
Fuel and lights	43 94
Labor	12,202 99
Rent of land	25 00
Salaries	2,011 00
Stationery and printing . .	33 75
Supplies	2,767 59
Teaming	252 62
Use of engine	169 15
	$18,058 23

Sewer Department (Metropolitan Sewer Connections).

Appropriation			$75,000 00
EXPENDED.			
For labor as per pay rolls . .		$25,731 17	
Advertising: —			
Boston Herald Co. . . .	$25 25		
Cambridge Chronicle Co. .	2 00		
James Cox	2 86		
Engineering Record . .	21 20		
Globe Newspaper Co. . .	15 50		
		66 81	
Bricks: —			
Chas. McMahon	2,178 09		
Parry Bros. & Co. . . .	3,161 25		
		5,339 34	
Carpentry, J. H. Keenan ..		266 32	
Canvas, Nolan Bros. . . .		62 60	
Cement, Waldo Bros. . . .		1,973 28	
Contract, Commercial Ave. Sewer, John T. Scully . .		2,592 75	
Freight on pipe, R. D. Wood & Co.		96 17	
Fuel, Coleman Bros. . . .		1,007 86	
Gravel: —			
Chas. Linehan	561 60		
John T. Scully	810 00		
		1,371 60	
Hardware and supplies: —			
Burditt & Bynner . . .	16 33		
Whittier Hardware Co. .	81 29		
Sundry persons	1 42		
		99 04	
Inspecting castings, Pittsburg Testing Laboratory . . .		13 96	
Iron castings, etc.: —			
Builders' Iron Foundry .	676 53		
Coffin Valve Co. . . .	520 00		
Mechanics' Iron Foundry .	81 66		
R. D. Wood & Co. . . .	2,341 06		
		3,619 25	
Lumber, E. D. Sawyer & Co.		9,550 92	
Amounts carried forward .		$51,791 07	$75,000 00

Amounts brought forward .		$51,791 07	$75,000 00
For pipe: —			
Addyston Pipe & Steel Co.	$1,185 00		
Greene & Co.	38 25		
D. W. Lewis	12 53		
Portland Stoneware Co. .	617 49		
R. D. Wood & Co. . . .	684 19		
		2,537 46	
Sundries		4 53	
Siphon, Wm. L. Miller . .		1,200 00	
Teaming: —			
P. Biggin	34 00		
Thos. O'Hara	725 13		
		759 13	
Tools and repairs: —			
Chas. H. Goldsmith . .	27 35		
James Maitland	18 45		
		45 80	
Use of engines and machine: —			
Carson French Machine Co.	1,070 50		
E. R. Cheney	811 75		
		1,882 25	
Use of tracks, etc., Boston & Albany R. R. Co. . . .		141 58	
Water supply, Cambridge Water Works		28 03	
Total			58,389 85
Balance unexpended . .			$16,610 15

SUMMARY OF EXPENDITURES.

Advertising	$66 81
Labor	29,790 24
Supplies	25,749 84
Teaming	759 13
Use of engine	1,882 25
Use of tracks	141 58
	$58,389 85

Sinking Funds.

Appropriation			$100,390 00
EXPENDED.			
For salaries: —			
Treasurer, Wm. W. Dallinger	$300 00		
Clerk, John McDuffie	25 00		
		$325 00	
Appropriation as required by City Ordinance for payment of debt, Commissioners of Sinking Funds		100,025 00	
Rent, Boston Safe Deposit and Trust Co.		40 00	
Total			100,390 00

State Aid.

Appropriation			25,500 00
RECEIVED.			
From the Commonwealth of Massachusetts in reimbursement, in part, of the amount the city has advanced, in conformity to the laws of the State, to volunteers and their families, or other dependents of volunteers in the army and navy: —			
For military aid	$1,474 89		
State aid	13,441 50		
Burials of soldiers and sailors	280 00		
		15,196 39	
Aid		60 00	
Board		60 44	
Money not called for on pay rolls		208 50	
		15,525 33	
EXPENDED.			
For salary of clerk, Chas. L. Russell		900 00	
State aid	$12,840 00		
Military aid	2,565 00		
Amounts carried forward	$15,405 00	$900 00	$25,500 00

Amounts brought forward .	$15,405 00	$900 00	$25,500 00
For soldiers and sailors' aid as per pay rolls	6,295 50		
		21,700 50	
Aid by cities and towns: —			
City of Boston	29 29		
Springfield	2 23		
Town of Spencer . . .	76 86		
		108 38	
Board and care: —			
City of Cambridge, O. of P.	303 99		
Commonwealth of Mass. At State Farm . . .	146 00		
Danvers Lunatic Hospital	436 42		
Taunton Lunatic Hospital	335 49		
Worcester Insane Asylum	175 03		
		1,396 93	
Burials: —			
J. W. Coveney	35 00		
Thos. Devens	70 00		
David Fudge	35 00		
J. J. Kelley	70 00		
A. E. Long	35 00		
Shea Bros.	70 00		
W. A. Taylor	35 00		
		350 00	
Car tickets, W. E. St. Railway Co.		10 00	
Fuel, Geo. M. Smith . . .		45 10	
Lunch, M. R. Jones . . .		6 25	
Stationery and printing: —			
Cotton & Gould	4 55		
Harvard Printing Co. . .	42 00		
H. E. Lombard	32 50		
Rhoades & Co.	8 75		
Stationery Department .	17 19		
		104 99	
Supplies, Geo. A. Davis . .		40 47	
Total			24,669 55
Balance unexpended . .			$830 45

Stationery and Printing.

Appropriation			$2,600 00
Transferred from Incidental Expenses			139 13
			2,739 13

RECEIVED.

For supplies	$879 49	

EXPENDED.

For advertising: —			
Cambridge Chronicle Co.	$3 00		
James Cox	109 09		
F. S. Hill	3 00		
		115 09	
Binding: —			
Harvard Printing Co.	1 00		
J. H. H. McNamee	80 02		
		81 02	
Examining bids, James Cox		3 00	
Examining City Documents, Chas. Walker		10 00	
Ink, Commonwealth of Mass.		19 50	
Ink funnels, C. E. Howe		5 00	
Postage, G. W. Ring		575 00	
Printing: —			
Cambridge Chronicle Co.	20 00		
James Cox	5 25		
James H. Cox	96 75		
J. Frank Facey	1 50		
Harvard Printing Co.	1,434 74		
L. F. Weston	16 50		
		1,574 74	
Stationery: —			
Cotton & Gould	209 46		
Thorp & Martin Mfg. Co.	146 32		
		355 78	
Total			2,739 13

Street Department (Bridges).

Appropriation			$3,500 00
Transferred from Street Department (Cleaning)			300 00
Transferred from Street Department (Collection of Ashes)			150 00
			$3,950 00

EXPENDED.

For salaries of drawtenders: —			
Wm. Burgess	$1,147 69		
Martin Flaherty	1,043 31		
Nathaniel M. Neale	600 96		
Labor, as per pay rolls	253 63		
		$3,045 59	
Hardware tools, F. A. White		14 35	
Lumber: —			
John S. Clary	126 55		
Geo. W. Gale Lumber Co.	184 59		
Wm. H. Wood & Co.	83 00		
		394 14	
Oakum, J. Baker & Co.		3 00	
Oil, A. N. Reynolds & Co.		6 24	
Repairs on bridges, Wm. L. Miller		486 16	
Total			3,949 48
Balance unexpended			52

SUMMARY OF EXPENDITURES.

Drawtenders	$2,791 96
Repairs	739 79
Supplies	417 73
	$3,949 48

Street Department (Cleaning).

Appropriation			$20,000 00
Transferred to Street Department (Bridges)	$300 00		
Transferred to Street Department (Paving Western Avenue)	3,625 00		
Transferred to Park Department (Shade Trees and Public Grounds)	500 00		
		4,425 00	
Amount carried forward			$15,575 00

Amount brought forward . .			$15,575 00
	EXPENDED.		
For salaries of foremen: —			
James Ferguson	$87 00		
Chas. McHugh	90 00		
E. Osborn	18 00		
John Reilley	126 00		
Labor as per pay rolls . .	12,229 33		
		$12,550 33	
Cleaning cart, Ames Plow Co.		28 00	
Sweepers and repairs: —			
Edson Mfg. Co.	154 90		
Miller & Shaw	2 00		
		156 90	
Teaming: —			
Timothy A. Callahan . .	5 00		
Frank J. Coulter . . .	115 75		
John Coughlin	40 50		
Elizabeth Cox	118 12		
James Culhane	131 25		
John T. Culhane . . .	36 00		
Patrick H. Dardis . . .	20 00		
James Doherty	50 25		
John A. Egan	10 00		
Joseph Finnick	15 00		
Emil Frederickson . . .	78 75		
John Gallivan	20 00		
James Gray	30 00		
S. Gustafson	27 00		
Robert Leary	55 00		
Chas. Linehan	93 25		
Chas. H. Linehan . . .	70 00		
Edward Lynch	5 00		
John McClellan	25 00		
Chas. McMahon	202 00		
Thos. McSorley	121 50		
J. P. McSorley	77 50		
Timothy Murphy . . .	100 50		
Thos. H. O'Hara . . .	175 00		
David O'Mara	35 00		
Michael O'Neil	35 00		
Henry O'Sullivan . . .	25 00		
Amounts carried forward .	$1,717 37	$12,735 23	$15,575 00

Amounts brought forward .	$1,717 37	$12,735 23	$15,575 00
For teaming: —			
John Quinn	111 50		
John F. Quinn	76 50		
John M. Riley	5 00		
Robert T. Ross	45 00		
T. F. Shaw	84 00		
B. F. St. George	121 50		
Jeremiah Sullivan . . .	37 50		
Sundry persons	5 00		
Peter Tumilty	40 50		
		2,243 87	
Tools, machines, and repairs: —			
American Road Machine Co.	133 33		
Ames Plow Co.	8 64		
Edson Mfg. Co.	53 20		
Wm. C. Oastler	355 50		
		550 67	
Total			15,529 77
Balance unexpended . .			45 23

SUMMARY OF EXPENDITURES.

Labor	$12,550 33
Teaming	2,243 87
Tools and supplies	735 57
	$15,529 77

Street Department (Collection of Ashes).

Appropriation			$17,500 00
Transferred to Street Department (Bridges)		$150 00	
Transferred to Park Department (Shade Trees and Public Grounds) . . .		500 00	
			650 00
			16,850 00

EXPENDED.

For labor as per pay rolls . .		13,013 20	
Hay and grain: —			
A. W. Goodnow & Co. . .	$181 64		
H. H. Turner & Co. . .	442 07		
Amounts carried forward .	623 71	$13,013 20	$16,850 00

Amounts brought forward .	$623 71	$13,013 20	$16,850 00
For hay and grain: —			
Waldo & Reed Co. . . .	728 31		
Geo. G. Wright	375 90		
		1,727 92	
Harness: —			
Ames Plow Co.	67 00		
Jas. Forgie & Son . . .	165 50		
Hugh McCaffrey	39 35		
Thomas McMahon . . .	49 20		
		321 05	
Horse and cart covers, Jas. Martin & Son		96 40	
Horses: —			
Cooper Bros.	675 00		
P. H. Dardis	850 00		
		1,525 00	
Horse shoeing, Wm. Balmer		2 50	
Oak, Henry J. Winde . .		19 28	
Professional services, J. A. Wolcott, M. D.		10 00	
Wagon, Ames Plow Co. . .		125 00	
Total			16,840 35
Balance unexpended . .			9 65

SUMMARY OF EXPENDITURES.

Labor	$13,023 20
Horses and wagons . . .	3,817 15
	$16,840 35

Street Department (Extension of Wyeth Street).

Appropriation			$13,767 81
EXPENDED.			
For salaries: —			
Assistant foremen: —			
E. Osborn	$183 00		
John M. Thayer . . .	57 75		
Labor as per pay rolls . .	4,570 41		
		$4,811 16	
Bricks, Chas. McMahon . .		50 10	
Amounts carried forward .		$4,861 26	$13,767 81

Amounts brought forward .		$4,861 26	$13,767 81
For examination of titles, A. J. Daly		25 00	
Gravel: —			
Wm. Balmer	$69 00		
John McGinnis	73 75		
Josephine E. Stone . . .	270 00		
Joshua Stone	159 00		
		571 75	
Stone: —			
Edge, Chas. McMahon .	1,871 68		
Field, sundry persons . .	1,857 51		
		3,729 19	
Weighing stone, Wm. Mahoney		49 53	
Teaming: —			
James Boyle	131 62		
Mrs. John Brassil . . .	95 62		
J. J. Connell	172 12		
Timothy Cosgrove . . .	185 62		
John Coughlin	138 37		
John T. Culhane	95 62		
Patrick J. Curley . . .	191 25		
Patrick H. Dardis . . .	221 62		
John Doody	113 62		
Joseph Finnick	100 12		
John Gallivan	166 50		
James Gray	129 37		
S. Gustafson	4 50		
Frank Hastings	38 25		
Martin Kneeland . . .	113 62		
Patrick Leahy	93 37		
Robert Leary	95 62		
Chas. Linehan	142 87		
Edw. Lynch	198 00		
Elizabeth Martell . . .	187 87		
John McClellan	166 50		
Elizabeth McCrehan . .	187 87		
Thomas O'Hara	3 75		
Jeremiah O'Keefe . . .	64 12		
Timothy O'Keefe . . .	167 62		
David O'Mara	114 75		
Henry O'Sullivan . . .	76 50		
Amounts carried forward .	$3,396 66	$9,236 73	$13,767 81

Amounts brought forward .	$3,396 66	$9,236 73	$13,767 81
For teaming :—			
Michael O'Sullivan . . .	253 12		
John M. Riley	259 87		
Patrick Riley	190 12		
Jeremiah Sullivan . . .	192 37		
Peter Tumilty	166 50		
		4,458 64	
Total			13,695 37
Balance unexpended . .			72 44

Street Department (Maintenance).

Appropriation	$86,100 00
Transferred to Street Dept. (Paving Western Avenue) .	5,695 00
	$80,405 00

RECEIVED.

For ashes, filling, scrapings, chopping blocks, etc. . .	$2,211 42	

EXPENDED.

For salaries:—			
Superintendents:—			
E. H. Reed	$833 30		
Chas. A. Brown . . .	1,166 70		
Clerks:—			
Geo. M. Clukas . . .	1,252 00		
John R. Wilson . . .	626 00		
Foremen:—			
Chas A. Brown . . .	532 00		
John A. Sheridan . .	1,265 00		
Sub-foremen:—			
James Ferguson . . .	18 00		
Chas. McHugh . . .	347 25		
Eldorado Osborn . . .	408 00		
John Reilley	418 50		
John M. Thayer . . .	492 00		
Laborers, as per pay rolls .	31,315 66		
		38,674 41	
Advertising:—			
D. A. Buckley	4 75		
Cambridge Chronicle Co. .	5 00		
James Cox	13 55		
Amounts carried forward .	$23 30	$38,674 41	$80,405 00

Amounts brought forward .	$23 30	$38,674 41	$80,405 00
For advertising: —			
F. S. Hill	5 00		
Somerville Journal . . .	4 25		
		32 55	
Atlas, G. W. Bromley & Co.		25 00	
Bricks, Boston Consolidated Brick Co.		13 50	
Brooms and brushes: —			
Chas. A. Austin & Co. .	128 17		
Asa Duren	11 43		
W. C. Duren	15 20		
		154 80	
Carpentry: —			
Ira G. Hersey	25 25		
C. L. Weldon	53 80		
		79 05	
Carriage, Hugh Stewart & Co.		150 00	
Carriage hire: —			
Chas. W. Dailey	3 00		
Lake and Moynahan . .	7 50		
H. K. Parsons	45 00		
M. J. Shea	35 00		
Whiting & Smith . . .	7 00		
		97 50	
Carriage and wagon repairs: —			
Chapman Carriage Co. .	42 69		
F. Ivers & Son	35 95		
A. J. Jones	52 73		
Chas. Waugh & Co. . .	159 80		
Sundry persons	11 45		
		302 62	
Car tickets, W. E. Street Railway Co.		10 00	
Cash expended: —			
Chas. A. Brown	8 52		
E. H. Reed	2 61		
		11 13	
Catch basin, Sewer Dept. .		28 20	
Dinners, M. R. Jones . . .		36 00	
Elevator buckets, Laminar Fibre Co.		59 40	
Amounts carried forward .		$39,674 16	$80,405 00

Amounts brought forward .		$39,674 16	$80,405 00
For fuel: —			
Broadway Wood Yard . .	$16 00		
Baker, Hunnewell Co. . .	1,526 25		
		1,542 25	
Gravel: —			
William Balmer	10 00		
Chas. Linehan	91 25		
Joshua Stone	1,262 70		
		1,363 95	
Hardware, tools, and supplies:			
Ames Plow Co.	277 60		
Bigelow & Dowse . . .	6 34		
A. B. Black	40 00		
Brock Bros.	77 47		
Dodge, Haley & Co. . .	456 09		
Wm. H. Gallison . . .	31 29		
Anthony S. Morss . . .	11 05		
Walworth Mfg. Co. . .	56 04		
F. A. White	139 34		
Sundry persons	7 98		
		1,103 20	
Harness and repairs: —			
W. H. Bustin & Son . .	41 00		
Jas. Forgie & Son . . .	352 97		
John Hancock	70 00		
Hugh McCaffrey	334 13		
Thos. McMahon	114 90		
Sundry persons	5 85		
		918 85	
Hay and grain: —			
Clark Bros.	52 00		
P. H. Dardis	20 00		
C. F. & G. W. Eddy . .	637 95		
A. W. Goodnow	2,389 04		
Merrill & Glazier . . .	909 63		
H. H. Turner & Co. . .	1,120 39		
W. P. Whittemore . . .	562 27		
Geo. G. Wright	1,625 51		
		7,316 79	
Horses: —			
Cooper Bros.	225 00		
P. H. Dardis	300 00		
		525 00	
Amounts carried forward .		$52,444 20	$80,405 00

Amounts brought forward .		$52,444 20	$80,405 00
For horse clipping, John Smith		9 00	
Horse shoeing: —			
Wm. Balmer	$98 00		
W. F. Garrett	4 75		
		102 75	
Hose, Boston Woven Hose Co.		86 68	
Lighting, Cambridge Electric Light Co.		264 24	
Lighting apparatus, Cambridge Electric Light Co. .		12 00	
Lumber: —			
John S. Clary	31 17		
Geo. W. Gale Lumber Co.	466 37		
N. N. Stickney	369 85		
Henry J. Winde	35 46		
		902 85	
Machine, engine, and iron work: —			
Boston Belting Co. . . .	81 45		
Broadway Iron Foundry .	20 93		
P. F. Burke	30 00		
Wm. Campbell & Co. . .	182 57		
E. R. Cheney	10 75		
Farrell Foundry and Machine Co.	225 94		
Wm. H. Gallison . . .	46 57		
Harrisburg Foundry . .	250 00		
J. H. Houghton	22 74		
Edw. Kendall & Sons . .	18 35		
Ingersoll Sergeant Drill Co.	332 56		
Miller & Shaw	587 40		
S. C. Nightingale & Childs	1,046 55		
Wm. C. Oastler	67 05		
Geo. W. Tibbetts, agent .	16 00		
A. J. Wellington . . .	142 80		
Sundry persons	19 50		
		3,101 16	
Moving building, H. S. Angus		20 00	
Oil, etc.: —			
E. W. Bigelow & Co. . .	57 29		
John H. Fuller	122 92		
Amounts carried forward .	$180 21	$56,942 88	$80,405 00

Amounts brought forward .	$180 21	$56,942 88	$80,405 00
For oil, etc: —			
Manufacturers' Oil Co. .	20 58		
A. N. Reynolds & Co. . .	29 45		
Standard Lubricant Co. .	46 15		
Standard Oil Co.	45 76		
		322 15	
Packing, Gould Packing Co. .		17 10	
Paints, varnish, etc.: —			
Howe & French	38 50		
Wadsworth, Howland & Co.	6 28		
		44 78	
Photos, W. H. Lerned, Jr. .		6 00	
Pipe, etc., Cambridge Water Works		15 20	
Plumbing, Moynahan & Co. .		28 56	
Powder: —			
American Powder Mills .	111 56		
A. J. Wellington . . .	21 50		
		133 06	
Removing night soil, R. M. Johnson		8 00	
Rent of wharf, Cambridge Gas Light Co.		275 00	
Repairing roof, H. F. Peak .		38 25	
Repairing tools: —			
Burrill & Dutton	4 80		
Chapman Carriage Co. .	21 27		
R. S. Easter & Son . . .	121 89		
D. J. Sullivan	34 95		
		182 91	
Sponge, A. Worcester & Sons		150 00	
Stationery and printing: —			
Cotton & Gould	98 63		
Jas. H. Cox	49 50		
Harvard Printing Co. . .	17 60		
Stationery Department .	71 54		
Sundry persons	9 45		
		246 72	
Street signs: —			
Hill Street Sign Co. . . .	90 80		
Eben Tucker	64 30		
		155 10	
Amounts carried forward .		$58,565 71	$80,405 00

Amounts brought forward .		$58,565 71	$80,405 00
For stone crusher, S. C. Nightingale & Childs		4,995 00	
Stone: —			
Sundry persons (field) . .	7,049 84		
Mass. Broken Stone Co. .	1,098 61		
Chas. Wilson	5,534 83		
		13,683 28	
Sundries		35 86	
Supplies: —			
Geo. H. Cheever . . .	11 50		
A. C. Curtis & Son . . .	18 04		
Hub Scale Solvent Co. . .	5 00		
Frank P. Merrill . . .	5 94		
Rust & Richardson Drug Co.	80 87		
Henry Thayer & Co. . .	24 49		
Sundry persons	4 95		
		150 79	
Teaming: —			
Wm. Condon	55 00		
Frank J. Coulter	76 25		
Elizabeth Cox	156 25		
James Culhane	27 00		
Emil Frederickson . . .	39 75		
John Gallivan	8 75		
Robert Leary	17 50		
Chas. Linehan	57 50		
Chas. McMahon	192 50		
Thomas McSorley . . .	156 25		
Thos. H. O'Hara . . .	52 50		
John Quinn	18 00		
John Quinn, Jr.	101 25		
Thos. Shaw	77 62		
B. F. St. George	103 75		
Sundry persons	58 75		
		1,198 62	
Telephone rent and tolls . .		516 30	
Use of horses: —			
P. H. Dardis	82 00		
Aaron Hale	13 00		
		95 00	
Waste, E. W. Bigelow & Co.		21 96	
Amounts carried forward .		$79,262 52	$80,405 00

Amounts brought forward .	$79,262 52	$80,405 00
For windows, Levi Boles & Son	9 25	
Work on flag-staffs, David Cass	9 50	
Total		79,281 27
Balance unexpended . .		$1,123 73

SUMMARY OF EXPENDITURES.

Salaries and labor	$38,674 41
Teaming	1,198 62
Stone and paving blocks . .	13,683 28
Gravel	1,363 95
Stone crushers and repairs .	7,424 04
Hay and grain	7,316 79
Horses, harnesses, carriages, wagons and repairs . . .	2,653 57
Fuel	1,542 25
Office and incidental expenses	1,732 72
Hardware, tools and supplies	2,357 04
Stable fittings, repairs, etc. .	1,334 60
	$79,281 27

Street Department (Paving).

(Edgestones and Sidewalks.)

Appropriation	$22,000 00
Transferred to Street Department (Paving Western Avenue)	1,070 00
	20,930 00
Surplus revenue	5,442 14
	26,372 14

RECEIVED.

For labor and materials . . .	$1,589 53	
Sidewalk assessments . .	11,852 61	
	$13,442 14	
Amount carried forward .		$26,372 14

Amount brought forward .			$26,372 14
EXPENDED.			
For labor as per pay rolls . .	$11,005 77		
Sub-foreman, John Reilley	49 50		
		$11,055 27	
Bricks, M. W. Sands . . .		5,224 70	
Catch basin, Sewer Department		19 85	
Cutting paving blocks: —			
John Splaine	39 00		
Thomas Walsh	336 38		
		375 38	
Derrick tops, D. Henry Cram		18 00	
Gravel: —			
Chas. Linehan	111 05		
Jas. M. Robbins	24 00		
Jerry Sullivan	7 50		
		142 55	
Lumber and cement: —			
John S. Clary	8 77		
Geo. W. Gale Lumber Co.	140 86		
Geo. McQuesten & Co. .	37 85		
N. N. Stickney	52 85		
		240 33	
Oil, Standard Oil Co. . . .		27 00	
Rebate on assessment, George Lamb		41 14	
Repairing tools, Wight & Scorgie		12 67	
Rope, Sewall & Day Cordage Co.		4 32	
Stone: —			
Austin Ford & Son . . .	663 71		
S. & R. J. Lombard . .	340 54		
Chas. McMahon	4,801 04		
Julius Osterhoudt . . .	1,627 58		
		7,432 87	
Teaming: —			
Mrs. John Brassil . . .	51 25		
Frank J. Coulter . . .	82 50		
Elizabeth Cox	95 00		
James Culhane	75 00		
John T. Culhane . . .	51 25		
Amounts carried forward .	$355 00	$24,594 08	$26,372 14

Amounts brought forward .	$355 00	$24,594 08	$26,372 14
For teaming: —			
James Doherty	142 50		
Patrick Leahy	55 00		
Robert Leary	75 00		
Chas. Linehan	17 50		
Chas. McMahon	65 00		
J. P. McSorley	72 50		
John Mooney	1 25		
Thos. O'Hara	113 75		
Thos. O'Hara, Jr. . . .	32 50		
Jeremiah O'Keefe . . .	17 50		
David O'Mara	46 25		
Michael O'Neil	25 00		
Michael O'Sullivan . . .	51 25		
John Quinn	157 50		
Patrick Riley	41 25		
Thomas F. Shaw . . .	115 00		
Michael J. Shea	27 50		
Jeremiah Sullivan . . .	50 00		
Peter Tumilty	82 50		
		1,543 75	
Tools: —			
Ames Plow Co.	70 36		
Jos. Breck & Sons . . .	11 40		
H. H. Harvey	5 11		
		86 87	
Twine, Bruce R. Ware & Co.		6 00	
Total			26,230 70
Balance unexpended . .			$141 44

SUMMARY OF EXPENDITURES.

Labor	$11,450 50
Bricks	5,224 70
Edgestone	5,805 29
Flagging	1,627 58
Gravel	142 55
Teaming	1,543 75
Tools and supplies	436 33
	$26,230 70

Street Department (Paving Western Avenue).

Appropriation transferred from			
Street Department (Cleaning) . . .		$3,625 00	
Street Department (Maintenance) . .		5,695 00	
Street Department (Paving) . . .		1,070 00	
			$10,390 00
EXPENDED.			
For foreman, John Reilley . .	$108 00		
Labor as per pay rolls . .	2,794 29		
		2,902 29	
Gravel: —			
Chas. Linehan	38 00		
Jerry Sullivan	228 50		
		266 50	
Stone: —			
Chas. McMahon	603 90		
Julius Osterhoudt . . .	199 42		
Chas. Wilson	5,694 30		
		6,497 62	
Teaming: —			
Wm. Condon	76 50		
Frank J. Coulter . . .	74 25		
James Culhane	111 37		
John A. Condon	40 50		
Elizabeth Cox	67 50		
Emil Frederickson . . .	27 00		
Chas. McMahon	33 75		
Thos. McSorley	69 75		
Thos. H. O'Hara . . .	78 75		
David O'Mara	78 75		
John Quinn	31 50		
B. F. St. George	31 50		
		721 12	
Total			10,387 53
Balance unexpended . .			2 47

SUMMARY OF EXPENDITURES.

Labor	$2,902 29
Edgestone	603 90
Flagging	199 42
Gravel	266 50
Paving blocks	5,694 30
Teaming	721 12
	$10,387 53

Street Department (Rebuilding Mt. Auburn Street).

Appropriation			$35,000 00
Additional appropriation			200 00
			$35,200 00
EXPENDED.			
For foremen: —			
James Ferguson	$48 00		
E. Osborn	288 00		
Labor as per pay rolls	12,981 42		
		$13,317 42	
Cutting stones, Wight & Scorgie		9 00	
Labor, Sewer Department		27 80	
Teaming: —			
P. Biggin	5 62		
James Boyle	398 25		
Peter Burns	223 75		
John J. Brassil	31 50		
Mrs. John Brassil	170 00		
T. A. Callaghan	351 25		
J. J. Connell	313 62		
Timothy Cosgrove	430 25		
John Coughlin	113 62		
John T. Culhane	187 50		
Patrick J. Curley	217 75		
Patrick Dardis	431 50		
John Doody	161 12		
Joseph Finnick	313 75		
Joseph B. Ford	67 50		
John Gallivan	525 12		
James Gray	326 50		
Frank Hastings	39 75		
Martin Kneeland	417 37		
Frank Lerner	51 75		
Edw. Lynch	376 50		
Robt. Leary	328 87		
Patrick Leahy	356 12		
Chas. Linehan	42 75		
Elizabeth Martell	306 75		
John McClellan	446 00		
Elizabeth McCrehan	251 25		
Frank McConologue	131 50		
Jeremiah McCrehan	18 00		
Amounts carried forward	$7,035 21	$13,354 22	$35,200 00

Amounts brought forward .	$7,035 21	$13,354 22	$35,200 00
For teaming: —			
Henry O'Sullivan . . .	284 75		
Thos. O'Hara	65 00		
Jeremiah O'Keefe . . .	65 00		
David O'Mara	240 62		
Michael O'Sullivan . . .	265 25		
John M. Riley	536 50		
Robert T. Ross	312 75		
Patrick Riley	203 00		
Jeremiah Sullivan . . .	310 62		
Michael Sullivan	107 50		
Michael Shea	193 00		
Peter Tumilty	301 62		
		9,920 82	
Gravel: —			
John McGinnis	25 00		
Josephine E. Stone . . .	76 80		
Joshua Stone	1,310 10		
		1,411 90	
Stone: —			
S. & R. J. Lombard . .	4,802 25		
Mass. Broken Stone Co. .	3,965 53		
Sundry persons (field) .	1,540 66		
		10,308 44	
Tools and repairs: —			
Ames Plow Co.	59 26		
R. S. Easter & Son . . .	43 16		
W. A. Easter	43 35		
Wight & Scorgie . . .	14 27		
		160 04	
Weighing stone, Wm. Maloney		41 07	
Total			35,196 49
Balance unexpended . .			3 51

SUMMARY OF EXPENDITURES.

Labor	$13,354 22
Cracked stone	3,965 53
Edgestone	4,802 25
Field stone	1,581 73
Gravel	1,411 90
Teaming	9,920 82
Tools and repairs	160 04
	$35,196 49

Street Department (Resurfacing Brattle and Craigie Streets).

Appropriation			$13,000 00
RECEIVED.			
From W. E. St. Railway Co.		$13,000 00	
EXPENDED.			
For foremen: —			
E. Osborn	$51 00		
Jas. A. Ferguson	36 00		
Labor as per pay rolls	1,965 48		
		2,052 48	
Gravel, Joshua Stone		908 70	
Stone, Mass. Broken Stone Co.		884 69	
Stone, field, sundry persons		1,580 11	
Teaming: —			
Peter Burns	186 74		
James Boyle	103 50		
Mrs. John Brassil	91 12		
Timothy Callaghan	456 74		
Wm. Condon	48 37		
J. J. Connell	141 75		
Timothy Cosgrove	101 25		
John T. Culhane	105 75		
Elizabeth Cox	18 00		
Patrick Curley	234 00		
Patrick H. Dardis	202 50		
John Doody	93 37		
Joseph Finnick	95 62		
John Gallivan	241 87		
James Gray	192 37		
S. Gustafson	27 00		
Martin Kneeland	86 62		
Robert Leary	97 87		
Patrick Leahy	140 62		
Frank Lerner	195 75		
Chas. Linehan	113 62		
Edward Lynch	113 62		
Elizabeth Martell	113 62		
Elizabeth McCrehan	111 37		
Thos. Riley	60 75		
		3,373 79	
Weighing, Wm. Mahoney		42 12	
Total			8,841 89
Balance unexpended			$4,158 11

Street Department (Watering).

Appropriation		$22,000 00
Surplus revenue		1,460 04
		$23,460 04

RECEIVED.

From sundry persons, for sprinkling streets	$12,468 49	

EXPENDED.

For salary of foremen: —			
Chas. McHugh	$414 00		
A. F. Miller	552 75		
Labor as per pay rolls	1,526 28		
		2,493 03	
Advertising, James Cox		1 80	
Carpentry, Ira G. Hersey		5 08	
Carriage repairs, Chas. Waugh & Co		41 85	
Hardware supplies: —			
Dodge, Haley & Co.	216 01		
F. A. White	30 65		
		246 66	
Horse hire, P. H. Dardis		32 00	
Lettering, Eben Tucker		15 75	
Lumber, Geo. W. Gale Lumber Co.		16 84	
Paints and varnish: —			
Babcock Varnish Co.	280 80		
Wadsworth, Howland & Co.	324 32		
F. A. White	38 60		
		643 72	
Refund, Chas. Harris		5 80	
Services collecting for street watering, Francis A. Cox		31 00	
Stationery and printing: —			
Cotton & Gould	13 50		
James H. Cox	8 50		
		22 00	
Sprinkling attachments, J. L. & H. K. Potter		281 25	
Valves, rubber goods, Boston Woven Hose Co.		42 13	
Amounts carried forward		$3,878 91	$23,460 04

Amounts brought forward .		$3,878 91	$23,460 04
For watering cart, Abbot-Downing Co.		425 00	
Sprinkling streets: —			
John J. Brassil	$454 95		
Patrick J. Burns . . .	543 15		
John F. Cawley	326 70		
John A. Condon	336 60		
Wm. Condon	511 65		
J. F. Coolidge	439 20		
F. J. Coulter	6 75		
James Coyle	447 75		
Elizabeth Cox	577 80		
James Culhane	432 45		
John T. Culhane . . .	519 30		
Patrick Dardis	436 95		
John J. Donahue . . .	597 15		
John Doody	529 65		
Robert Fawcett	438 30		
Patrick Finley	356 40		
John J. Fitzgerald . . .	369 45		
Joseph B. Ford	522 90		
Emil Frederickson . . .	425 70		
Hugh O. Harney . . .	283 95		
James Kelley	394 20		
Chas. Linehan	436 05		
Richard F. Martell . . .	447 75		
N. J. McConologue . . .	566 55		
Thomas McDermott . .	421 65		
Charles McMahon . . .	53 55		
Robert McMahon . . .	474 30		
Thomas McSorley . . .	598 95		
John A. Mooney . . .	390 60		
Jas. E. Morse	8 55		
Alexander Nixon . . .	383 85		
C. J. O'Callaghan . . .	498 60		
Timothy O'Keefe . . .	456 30		
John A. O'Sullivan . . .	494 10		
Michael O'Sullivan . . .	338 85		
James Prendable . . .	454 05		
Joseph Ray	535 05		
Patrick Riley, Jr. . . .	466 20		
Thomas Riley	208 57		
Amounts carried forward .	$16,184 47	$4,303 91	$23,460 04

Amounts brought forward .	$16,184 47	$4,303 91	$23,460 04
For sprinkling streets: —			
John D. Shea	536 40		
Michael J. Shea	544 95		
B. F. St. George	406 35		
Peter Tumilty	578 70		
Mrs. J. F. White . . .	409 50		
John Whitston	486 00		
		19,146 37	
Total			23,450 28
Balance unexpended . .			9 76

SUMMARY OF EXPENDITURES.

Salary of Superintendent of Watering Carts	$966 75
Incidentals	134 45
New watering cart	425 00
Repairs of watering carts .	2,747 71
Sprinkling by contract . .	19,176 37
	$23,450 28

Street Department (Widening Davenport Street).

Appropriation	$1,010 00

EXPENDED.

For labor as per pay rolls . .	$226 81	
Stone, Chas. McMahon . .	307 57	
Total		534 38
Balance unexpended . .		475 62

Street Department (Widening Harvard Street).

Appropriation	$17,000 00

EXPENDED.

For labor as per pay rolls . .	$1,801 83	
Bricks, Parry Bros. . . .	13 50	
Contract, Barber Asphalt Paving Co.	13,110 00	
Cordage, Sewell & Day Cordage Co.	10 08	
Amounts carried forward .	$14,935 41	$17,000 00

Amounts brought forward .		$14,935 41	$17,000 00
For expense of changing porch, Harvard University . . .		51 40	
Moving fence, Geo. Hezlitt .		156 00	
Sewer Department		34 61	
Sods, Park Department . .		6 03	
Teaming, Thos. O'Hara . .		5 00	
Tools, Ames Plow Co. . .		8 19	
Total			15,196 64
Balance unexpended . .			1,803 36

Street Department (Widening Norton Street).

Appropriation			$1,740 00
EXPENDED.			
For labor, as per pay rolls . .		$848 29	
Bricks: —			
Chas. McMahon	$25 05		
M. W. Sands	307 96		
		333 01	
Edgestones, Chas. McMahon		501 22	
Labor, Sewer Department .		24 80	
Teaming, Thos. O'Hara . .		2 50	
Total			1,709 82
Balance unexpended . .			30 18

Treasury Department.

Appropriation			12,500 00
Surplus revenue			177 54
			$12,677 54
RECEIVED.			
For collector's fees		$1,677 54	
EXPENDED.			
For salaries: —			
City Treasurer, Wm. W. Dallinger	$3,000 00		
Clerks: —			
E. G. Stevens	1,408 50		
E. J. Howlett	1,043 33		
Amounts carried forward .	$5,451 83		$12,677 54

Amounts brought forward .	$5,451 83		$12,677 54
For clerks: —			
C. H. Dodge	939 00		
J. H. Webber	1,043 33		
Temporary clerks . . .	994 31		
		$8,428 47	
Advertising: —			
Boston Daily Advertiser .	17 50		
James Cox	119 48		
		136 98	
Atlas, G. W. Bromley & Co.		15 00	
Bank note detector, J. S. Dewitt		1 00	
Bankers' Almanac and Register		4 00	
Carriage hire, M. J. Fairbanks		492 00	
Car tickets, W. E. Street Railway Co.		25 00	
Commissions for collecting taxes: —			
Joseph Fox	681 34		
Warren Ivers	1,011 86		
		1,693 20	
Coin holder, C. E. Howe .		3 50	
Directories		10 00	
Hardware, F. A. White . .		3 26	
Postage, G. W. Ring . . .		954 00	
Recording deeds, Chas. B. Stevens		55 12	
Repairing bank punch, J. W. Williams		2 50	
Sharpening erasers, C. L. Bradlee		1 20	
Stamps and repairs: —			
T. S. Buck	8 25		
L. W. Poole	4 00		
		12 25	
Stationery and printing: —			
American Bank Note Co. .	144 70		
Cotton & Gould	117 61		
Jas. H. Cox	74 25		
Harvard Printing Co. . .	154 60		
Amounts carried forward .	$491 16	$11,837 48	$12,677 54

Amounts brought forward .	$491 16	$11,837 48	$12,677 54
For stationery and printing: —			
Stationery Department .	45 37		
L. F. Weston	33 00		
	——	569 53	
Telephone rent and tolls . .		135 00	
Total			12,542 01
Balance unexpended . .			$135 53

Water Works (Construction).

General Account.

Appropriation			$35,000 00
Transferred from Water Works (Construction, Payson Park Reservoir) . .		$5,000 00	
Surplus revenue		1,239 00	
			6,239 00
			41,239 00

RECEIVED.

For engine house	$900 00		
House on Woodlawn Avenue	159 00		
Grass and gravel	180 00		
	———	1,239 00	

EXPENDED.

For labor, as per pay rolls . .		9,918 20	
Carriage hire, Gwynne & Co.		12 00	
Cart, Ames Plow Co. . . .		435 00	
Castings, fittings, and hydrants: —			
Barbour, Stockwell & Co. .	$153 00		
Chapman Valve Mfg. Co. .	833 78		
Coffin Valve Co.	75 00		
Davis & Farnum Mfg. Co.	215 11		
Ludlow Valve Co. . . .	12 90		
Peet Valve Co.	701 00		
Walworth Mfg. Co. . . .	543 75		
	———	2,534 63	
Contract, building house and barn, J. H. Keenan . .		1,853 21	
Commissions on sales: —			
John R. Fairbairn . . .	51 00		
P. Allen Lindsey . . .	408 10		
	———	459 10	
Amounts carried forward .		$15,212 14	$41,239 00

Amounts brought forward .		$15,212 14	$41,239 00
For expressage		11 00	
Hose, Boston Woven Hose Co.		24 75	
Lead, Chadwick Lead Works		1,320 46	
Lumber, Geo. W. Gale Lumber Co.		72 57	
Meters: —			
Hersey Mfg. Co.	144 90		
Metropolitan Meter Co. .	30 00		
Union Water Meter Co. .	311 50		
Daniel P. Weir	22 50		
		508 90	
Packing: —			
S. C. Nightingale & Childs	52 68		
Perrin, Seamans & Co. .	14 90		
		67 58	
Pipe, Donaldson Iron Co. .		15,060 53	
Printing, John Wilson & Son		56 00	
Repairing tools, James Maitland		49 32	
Stone, S. & R. J. Lombard .		26 00	
Sundries		15 25	
Teaming, Peter Tumilty . .		516 98	
Tools, Perrin, Seamans & Co.		9 94	
Total			32,951 42
Balance unexpended . .			8,287 58

SUMMARY OF EXPENDITURES.

Building house and barn . .	$1,853 21
Castings, gates, hydrants, etc.	2,534 63
Commissions on sales . . .	459 10
Labor	9,918 20
Lead and packing	1,388 04
Meters	508 90
Pipe	15,060 53
Teaming	516 98
Watering cart	435 00
Miscellaneous	276 83
	$32,951 42

Water Works (Construction).

Fresh Pond Land.

Appropriation			$25,000 00
Additional appropriation		$7,000 00	
Transferred from Water Works (Construction, Payson Park Reservoir)		20,000 00	
			27,000 00
			52,000 00

EXPENDED.

For examination of titles, Wm. V. Thompson		23 00	
Land and damages: —			
John Q. Blake	$2,485 92		
Mary Flannigan, Heirs of	2,159 00		
Elizabeth W. Keen, Heirs of	6,971 85		
Patrick McDonnell, Est. of	5,313 05		
Martin T. McDonnell	5,250 00		
J. Howard Richardson	200 00		
Amos Stone	5,209 91		
		27,589 73	
Recording deeds, Chas. B. Stevens		5 44	
Services of City Solicitor, Law Department		750 00	
Sewer Assessments, Sewer Department		110 72	
Typewriting, Geo. B. French		11 00	
Total			28,489 89
Balance unexpended			23,510 11

Water Works (Construction).

Fresh Pond Reservoir.

Appropriation			$50,000 00
Transferred from Water Works (Construction, Payson Park Reservoir)			19,700 00
			69,700 00

EXPENDED.

For labor as per pay rolls		$37,630 85	
Bridge at Fresh Pond Avenue, Massillon Bridge Co.		1,375 00	
Amounts carried forward		$39,005 85	$69,700 00

Amounts brought forward .		$39,005 85	$69,700 00
For carpentry, Kelley & McKinnon		185 33	
Drinking fountain, Henry F. Jenks		80 00	
Fuel, Richardson & Bacon .		43 25	
Gravel, John McGinnis . .		298 25	
Hardware, tools, and repairs:—			
Ames Plow Co.	$47 84		
Perrin, Seamans & Co. . .	36 87		
Sundry persons	14 54		
	———	99 25	
Loam, Doody, Curley & Callaghan		8,784 08	
Lumber and cement, Geo. W. Gale Lumber Co. . .		62 85	
Manure, James Boyle . .		147 42	
Oatmeal, H. M. Grant . .		19 02	
Paint, J. H. & J. P. Thayer & Co.		69 00	
Services, Geo. E. Waring, Jr.		110 65	
Services of engineers . . .		65 00	
Sundries		10 73	
Stone dust, Mass. Broken Stone Co.		36 61	
Ties, Fitchburg R. R. Co. .		122 50	
Use of locomotive and cars, Fitchburg R. R. Co. . .		8,858 03	
Teaming:—			
David Barry	22 50		
Peter Berube	334 50		
James Boyle	668 12		
John J. Brassil	198 00		
Peter Burns	200 25		
Chas. Conlan	692 25		
J. J. Connell	227 25		
James Culhane	238 50		
John T. Culhane . . .	204 75		
Patrick Curley	547 25		
P. H. Dardis	97 50		
Doody, Curley & Callaghan	60 00		
Ed. Eager	339 00		
Amounts carried forward .	$3,829 87	$57,997 82	$69,700 00

Amounts brought forward .	$3,829 87	$57,997 82	$69,700 00
For teaming: —			
Joseph Finnick	75 00		
John Gallivan	22 50		
Francis Gray	337 50		
James Gray	135 00		
Frank Hastings	3 00		
David Landergan . . .	348 00		
Martin McDonald . . .	346 50		
Michael Murphy	348 00		
Timothy Murphy . . .	258 00		
J. W. O'Connor	306 75		
Thos. H. O'Hara . . .	275 25		
David O'Mara	189 00		
Michael O'Sullivan . . .	275 25		
John Riley	169 12		
Denis Shea	13 50		
Jeremiah Sullivan . . .	470 25		
Peter Tumilty	231 75		
		7,634 24	
Total			65,632 06
Balance unexpended . .			4,067 94

SUMMARY OF EXPENDITURES.

Services of engineers and labor	$37,806 50
Teaming	7,634 24
Fitchburg Railroad Co. . .	8,980 53
Loam	8,784 08
Bridge	1,375 00
Miscellaneous	1,051 71
	$65,632 06

Water Works (Construction).

Hobbs Brook Reservoir.

Appropriation	$50,000 00
Transferred from Water Works (Construction, Payson Park Reservoir)	50,000 00
Additional appropriation	22,323 00
Amount carried forward	$122,323 00

Amount brought forward .			$122,323 00
EXPENDED.			
For laborers as per pay rolls .		$2,608 67	
Advertising: —			
Boston Daily Advertiser .	$15 00		
James Cox	3 43		
		18 43	
Blue prints: —			
Spaulding & Moss . . .	8 00		
C. Irving Swan	4 75		
		12 75	
Board of city employees . .		519 86	
Borings, Hopkinton Artesian Well Co.		1,275 30	
Carpentry: —			
Ira G. Hersey	13 13		
Daniel B. Holman & Son .	15 40		
W. H. Norris	13 20		
		41 73	
Carriage hire: —			
J. E. Fabyan	5 00		
J. A. Hunter	2 00		
Grafton E. Kirwin . . .	93 00		
Lake & Moynahan . . .	5 00		
John Nixon	12 00		
W. J. Richardson . . .	378 00		
Whiting & Smith . . .	11 00		
		506 00	
Car tickets: —			
Boston & Maine R. R. Co.	10 50		
Fitchburg R. R. Co. . .	130 20		
		140 70	
Cash expended for sundries : —			
John L. Harrington . . .	7 15		
L. M. Hastings	3 52		
Geo. A. Merrill	1 01		
W. H. Tuck	7 06		
		18 74	
Cigars: —			
A. R. Bayley & Co. . .	1 25		
B. P. Clarke & Co. . . .	10 50		
		11 75	
Driving wells in Waltham and vicinity, Daniel Russell .		411 82	
Amounts carried forward .		$5,565 75	$122,323 00

Amounts brought forward .		$5,565 75	$122,323 00
For furniture, Phillips Bros. & Co.		22 00	
Granite posts, John J. Horgan		57 00	
Labor		753 26	
Land and damages:—			
Minnie E. Adams . . .	$3,570 00		
Clara E. & Chas. S. Bruce.	5,000 00		
Andrew J. Dougherty . .	7,788 75		
John Flynn	4,000 00		
A. J. Merrill	5,400 00		
Catherine Sullivan . . .	2,900 00		
Chas. H. Teel	4,250 00		
C. L. Viles	150 00		
Susan M. Wentworth . .	1,200 00		
		34,258 75	
Levelling rods, Stowell Bros.		23 00	
Lumber:—			
Buttrick Lumber Co. . .	45 14		
Wood, Barker & Co. . .	48 43		
Sundry persons	4 00		
		97 57	
Lunches, M. R. Jones . .		39 00	
Maps, Boston Engraving Co.		20 00	
Mounting prints, W. W. White & Co.		12 50	
Printing:—			
American Bank Note Co. .	135 00		
Cambridge Chronicle Co. .	10 00		
Jas. H. Cox	2 00		
		147 00	
Recording deeds, Chas. B. Stevens		10 75	
Repairing tools, Jas. E. Moody		4 00	
Services, appraising land:—			
George Flint	275 00		
S. S. Gleason	50 00		
Albert B. Hopkins . . .	10 00		
Wm. F. Rooney	50 00		
E. P. Smith	505 00		
		890 00	
Services as consulting engineer:—			
Alphonse Fteley	1,000 00		
M. M. Tidd	1,957 76		
		2,957 76	
Amounts carried forward .		$44,858 34	$122,323 00

Amounts brought forward .		$44,858 34	$122,323 00
For services Legal Law Department	$750 00		
Sherman Hoar	150 00		
C. J. McIntire	150 00		
Wm. E. Russell	300 00		
		1,350 00	
Services of Engineering Department		3,236 60	
Stationery supplies: —			
Frost & Adams	26 45		
E. F. Hunt & Co. . . .	75		
		27 20	
Surveying instruments and supplies:			
Buff & Berger	403 50		
Chas. C. Hutchinson . .	39 70		
		443 20	
Tools, hardware, etc.: —			
Ames Plow Co.	87 90		
Burditt & Bynner . . .	61 50		
Josiah Cummings, Son & Co.	10 00		
A. M. Robbins	16 54		
F. A. White	22 00		
		197 94	
Use of transit, Geo. A. Merrill		12 50	
Teaming: —			
Peter Berube	43 31		
P. Biggin	6 00		
James Boyle	76 00		
Wm. Buckley	26 13		
J. F. Cawley	36 44		
Chas. Conlan	55 69		
Frank M. Dempsey . . .	26 88		
Mark Driscoll	41 32		
Mark Ellsworth	78 50		
John F. Farrar	100 63		
John Flynn	34 38		
Wm. H. Flynn	2 00		
Thos. Griggs	5 00		
John Harney	23 38		
A. T. Hunter	26 88		
John H. Hussey	82 50		
Ed. Eager	7 56		
Amounts carried forward .	$672 60	$50,125 78	$122,323 00

Amounts brought forward .	$672 60	$50,125 78	$122,323 00
For teaming: —			
David Landergan . . .	35 06		
John F. Lynch	5 50		
C. Linehan	41 25		
Elizabeth Martell . . .	34 38		
F. McConologue	30 25		
Jeremiah McCrehan . .	41 25		
M. McDonald	50 88		
Peter Malone	28 19		
J. A. Mooney	54 31		
Michael Murphy	19 94		
Andrew Nixon	9 63		
John M. Riley	45 38		
James Shea	22 69		
Dennis Shea	14 44		
Peter Tumilty	57 50		
John H. Whetstone . .	66 00		
R. Wyman	23 43		
		1,252 68	
Total			51,378 46
Balance unexpended . .			70,944 54

SUMMARY OF EXPENDITURES.

Services of	
Appraisers	$890 00
Engineers	6,194 36
Lawyers	1,350 00
Board of employees . . .	519 86
Borings and driving wells .	1,687 12
Carriage hire	506 00
Car fares	140 70
Hardware, tools, etc. . . .	201 94
Labor	3,361 93
Land damages	34,258 75
Lunches and cigars . . .	50 75
Stationery and printing . .	174 20
Surveying instruments . .	478 70
Teaming	1,252 68
Miscellaneous	311 47
	$51,378 46

Water Works (Payson Park Reservoir).

Appropriation		$250,000 00
Transferred to Water Works (Construction, Fresh Pond Reservoir)	$13,500 00	
Transferred to Water Works (Construction, Fresh Pond Reservoir)	6,200 00	
Transferred to Water Works (Construction, Hobbs Brook)	50,000 00	
Transferred to Water Works (Construction, Fresh Pond Land)	20,000 00	
Transferred to Water Works (Construction, General)	5,000 00	
		94,700 00
		155,300 00
Surplus revenue		2,902 20
		158,202 20

RECEIVED.

From sundry persons, for loam, etc.	2,902 20	

EXPENDED.

For salary of engineer, M. M. Tidd	$208 33		
Labor as per pay rolls	1,392 25		
		1,600 58	
Advertising: —			
Boston Herald Co.	37 88		
James Cox	90		
Engineering News Publishing Co.	43 60		
Engineering Record	42 80		
Globe Newspaper Co.	11 00		
		136 18	
Blue prints and supplies, Frost & Adams		49 65	
Carriage hire: —			
M. J. Fairbanks	3 00		
Whiting & Smith	9 00		
		12 00	
Carpentry: —			
Ira G. Hersey	7 48		
J. H. Keenan	21 26		
		28 74	
Amounts carried forward		$1,827 15	$158,202 20

Amounts brought forward .		$1,827 15	$158,202 20
For contract for building reservoir, Richard A. Malone .		689 18	
Examining titles, Wm. V. Thompson		5 00	
Hardware, tools, etc.: —			
Brock Bros.	$22 62		
Sundry persons	5 20		
		27 82	
Land in Payson Park, James S. Gill		2,080 90	
Lumber, Geo. W. Gale Lumber Co.		71 96	
Loam, Doody, Callaghan & Curley		1,069 47	
Plans, etc., for pumping engine, E. D. Leavitt . .		3,670 50	
Printing, Harvard Printing Co.		124 40	
Services, Engineering Department		167 83	
Special trips, W. E. Street Railway Co.		119 85	
Sundries		5 77	
Teaming: —			
Peter Berube	14 63		
James Boyle	103 13		
Peter Burns	4 50		
Jas. Culhane	61 88		
P. H. Dardis	5 63		
Ed. Eager	20 26		
Francis Gray	16 88		
David Landergan . . .	28 13		
M. McDonald	32 07		
Michael Murphy	19 13		
Timothy Murphy . . .	5 63		
J. W. O'Connor	65 82		
Thos. H. O'Hara . . .	98 63		
John Riley	30 38		
Denis Shea	57 38		
		564 08	
Total			10,423 91
Balance unexpended . .			$147,778 29

SUMMARY OF EXPENDITURES.

Building reservoir	$689 18
Civil engineering	376 16
Labor	1,392 25
Land	2,080 90
Loam	1,069 47
Plans, etc., for pumping eng.	3,670 50
Sundries	581 37
Teaming	564 08
	$10,423 91

Water Works (Construction).

Public Sanitaries.

Appropriation			$1,200 00
EXPENDED.			
For labor as per pay rolls		$62 13	
Advertising, James Cox		68	
Iron work, Barbour, Stockwell & Co.		28 03	
Urinals, Geo. T. McLauthlin & Co.		724 50	
Valve, Chapman Valve Mfg. Co.		10 10	
Total			825 44
Balance unexpended			$374 56

Water Works (Construction).

Stony Brook Reservoir.

Appropriation			$1,861 43
EXPENDED.			
For execution of court, City of Waltham		$407 97	
Services:—			
Wm. B. Durant	10 00		
B. S. Tolman	15 00		
		25 00	
Typewriting, Geo. B. French		9 35	
Total			442 32
Balance unexpended			$1,419 11

Water Works (Maintenance).

Appropriation			$20,000 00
Additional appropriation			8,000 00
			28,000 00
RECEIVED.			
From sundry persons for			
Damage done by electricity	$666 27		
Teaming and materials sold	301 62		
		$967 89	
EXPENDED.			
For salaries: —			
Superintendents: —			
John L. Harrington	$982 50		
Hiram Nevons	1,185 00		
Assistant Superintendent, John L. Harrington	757 15		
Clerk, Hattie F. Milligan	626 00		
Inspector, F. G. Davis	900 00		
Mechanic, B. P. Doe	937 25		
Treasurer of Sinking Fund of Water Works, Wm. W. Dallinger	200 00		
Laborers as per pay rolls	14,115 10		
		19,703 00	
Advertising: —			
Cambridge Chronicle Co.	8 50		
F. S. Hill	2 25		
		10 75	
Analysis of water, Edw. S. Wood		10 00	
Carpentry: —			
Kelley & McKinnon	9 94		
J. H. Keenan	18 00		
W. H. Norris	26 68		
		54 62	
Carriage and wagon repairs: —			
F. Ivers & Son	41 00		
A. J. Jones	51 48		
Hugh Stewart & Co.	226 25		
Chas. Waugh & Co.	84 85		
		403 58	
Car tickets: —			
Fitchburg Railroad Co.	78 80		
W. E. Street Railway Co.	250 00		
		328 80	
Amounts carried forward		$20,510 75	$28,000 00

Amounts brought forward .		$20,510 75	$28,000 00
For cash expended, sundry persons		13 41	
Damages, Michael F. Reed, et al		20 00	
Expressage: —			
Hatch & Co.	$9 40		
Savage & Son	56 97		
Sundry persons	3 80		
		70 17	
Fuel: —			
Coleman Bros.	70 35		
G. F. Frost	7 35		
		77 70	
Gas, Camb. Gas Light Co. .		34 71	
Grass seed, etc., Schlegel & Fottler		24 38	
Hardware, tools, machinery, and repairs:			
Ames Plow Co.	61 54		
Barbour, Stockwell & Co. .	28 63		
Burditt & Bynner . . .	286 02		
Chapman Valve Mfg. Co.	45 22		
Coffin Valve Co.	14 12		
D. W. Gage	32 80		
C. H. Goldsmith	9 55		
James Maitland	402 68		
Miller & Shaw	10 99		
Perrin, Seamans & Co. .	48 30		
H. A. Scranton	15 50		
Sundry persons	6 25		
Walworth Mfg. Co. . . .	266 80		
F. A. White	93 39		
		1,321 79	
Harness and repairs, M. Cavanagh		95 60	
Hay, grain, and straw: —			
Coleman Bros.	75		
J. Cushing & Co. . . .	628 68		
Patrick Glennon	43 98		
		673 41	
Horse, P. H. Dardis . . .		200 00	
Horse clipping, John Smith .		6 00	
Horse shoeing: —			
Wm. Bell	6 75		
Amounts carried forward	$6 75	$23,047 92	$28,000 00

Amounts brought forward .	$6 75	$23,047 92	$28,000 00
For horse shoeing: —			
John F. Gurry	64 63		
Thomas Smith	202 00		
		273 38	
Hose, packing: —			
Boston Woven Hose Co. .	21 55		
S. C. Nightingale & Childs	9 27		
		30 82	
Inspections of Water Board: —			
Carriage hire: —			
F. D. Bartlett	26 00		
L. W. Bellew	12 00		
G. H. Buxton & Co. . .	24 00		
J. Callahan	36 00		
C. W. Dailey	31 00		
J. E. Fabyan	34 00		
M. J. Fairbanks . . .	47 50		
Gwynne & Co. . . .	7 00		
Lake & Moynahan . .	29 00		
E. A. Leeman & Co. .	12 00		
Joseph Le Farre . . .	12 00		
James McGovern . . .	24 00		
F. O'Donnell	12 00		
H. K. Parsons & Co. .	24 00		
W. J. Richardson . .	63 00		
M. J. Shea	17 00		
Whiting & Smith . . .	47 00		
		457 50	
Cigars: —			
A. R. Bayley & Co. . .	3 87		
B. P. Clarke & Co. . .	21 50		
Holderer & Macdonald .	15 35		
		40 72	
Refreshments: —			
M. R. Jones	128 00		
Joseph Lee	279 15		
		407 15	
Lead, Chadwick Lead Works		14 21	
Lamps, etc., Pettingell-Andrews Co.		6 13	
Lumber and cement, Geo. W. Gale Lumber Co. . . .		386 73	
Masonry, Stearns & Waterman		63 44	
Amounts carried forward		$24,728 00	$28,000 00

Amounts brought forward .		$24,728 00	$28,000 00
For meters and repairs: —			
Hersey Mfg. Co.	$2 65		
National Meter Co. . . .	107 45		
Thompson Meter Co. . .	8 50		
Union Water Meter Co. .	77 30		
H. R. Worthington . . .	80 52		
		276 42	
Painting and glazing: —			
J. L. P. Ackers	10 65		
J. H. & J. P. Thayer & Co.	6 10		
		16 75	
Plumbing: —			
D. W. Gage	8 85		
Levi Hawkes	13 62		
		22 47	
Repairing drinking fountain, Edw. Kendall & Sons . .		10 00	
Rent, Cambridge Safe Deposit and Trust Co.		20 00	
Reports, Fred W. Jackson, M. D.		75 00	
Rubber boots and repairs, H. Sleap & Co.		6 25	
Salt, J. A. Holmes & Co. .		20 55	
Stamps, etc., T. S. Buck . .		8 00	
Stationery and printing: —			
Cambridge Chronicle Co. .	40 50		
Cotton & Gould	70 31		
Jas. H. Cox	11 75		
Harvard Printing Co. . .	41 80		
Thorp & Martin Co. . .	99 95		
Samuel Ward Co. . . .	9 50		
Sundry persons	2 05		
		275 86	
Stone, Massachusetts Broken Stone Co.		161 64	
Sundries		17 25	
Subscriptions: —			
Engineering Record . .	5 00		
Fire and water	3 00		
		8 00	
Stove work: —			
S. C. Higgins	2 21		
Amounts carried forward .	$2 21	$25,646 19	$28,000 00

Amounts brought forward .	$2 21	$25,646 19	$28,000 00
For stove work: —			
A. M. Robbins	8 50		
		10 71	
Storage, Edw. W. Hinks Est.		70 00	
Sundry supplies: —			
H. S. Andros	6 50		
J. A. Holmes & Co. . .	67 15		
Sundry persons	4 39		
		78 04	
Telephone rent and tolls, N. E. Telephone Co. . . .		431 20	
Teaming: —			
James Boyle	47 50		
Timothy Callahan . . .	35 00		
Patrick J. Curley . . .	70 00		
P. H. Dardis	35 00		
W. E. Kingsbury . . .	3 75		
John Riley	35 00		
Peter Tumilty	55 50		
		281 75	
Typewriting: —			
Geo. B. French	36 55		
Helen C. Littlefield . . .	3 75		
		40 30	
Use of horse: —			
F. D. Bartlett	75 00		
Peter Tumilty	5 00		
		80 00	
Total			26,638 19
Balance unexpended . .			$1,361 81

SUMMARY OF EXPENDITURES.

Superintendents' salary . .	$2,167 50
Labor pay roll	16,709 50
Office expenses	1,188 91
Blacksmith work	402 68
Car tickets	328 80
Castings and fittings . . .	295 43
Expressage	70 17
Fuel and gas	112 41
Hardware	575 38
Harnesses and wagons . .	499 18
Hay and grain	673 41
Amount carried forward .	$23,023 37

Amount brought forward .	$23,023 37	
Horse	200 00	
Horse shoeing and clipping .	279 38	
Lead and packing	93 33	
Lumber, lime, and cement .	386 73	
Meters and repairs	276 42	
Teaming and gravel . . .	281 75	
Telephone service	431 20	
Inspections by Water Board	905 37	
Miscellaneous	760 64	
	$26,638 19	

Water Works (Maintenance).

Office Expenses.

Appropriation	$5,800 00
Additional appropriation	225 00
	6,025 00

EXPENDED.

For salaries:—			
Water Registrar, Walter H. Harding	$2,200 00		
Office clerks:—			
H. L. Lincoln	1,000 00		
Mabel M. Robbins . .	327 25		
Temporary	9 75		
		$3,537 00	
Atlas, G. W. Bromley & Co.		25 00	
Car tickets, W. E. Street Railway Co.		50 00	
Rent of office, shop, etc., public property		2,000 00	
Stationery and printing:—			
Cambridge Chronicle Co. .	12 00		
Cotton & Gould	132 73		
Harvard Printing Co. . .	43 50		
Stationery Department . .	3 25		
Thorp & Martin Co. . .	55 67		
Walker, Young & Co. . .	15 00		
		262 15	
Sundries:—			
F. L. Beunke	6 00		
T. S. Buck	1 00		
Jas. Cox	2 00		
Amounts carried forward .	$9 00	$5,874 15	$6,025 00

Amount brought forward .	$9 00	$5,874 15	$6,025 00
For sundries:—			
C. G. Hurlburt	5 00		
E. F. Hunt & Co. . . .	3 00		
E. A. Jones	1 00		
John H. Kelsey	3 87		
W. H. Norris	2 00		
Phillips Bros. & Co. . .	1 00		
Pettingell-Andrews Co. .	1 69		
Geo. H. Richter & Co. .	4 05		
Sampson, Murdock & Co.	5 00		
	——	35 61	
Typewriter and desk and repairs, W. M. Belcher & Co.		106 35	
Total			6,016 11
Balance unexpended . .			8 89

Water Works (Maintenance).

Pumping.

Appropriation			$13,200 00
EXPENDED.			
For salaries of: —			
Engineer, E. C. Brooks .	$1,500 00		
Assistant Engineer, Wm. Blaisdell	1,042 87		
Labor as per pay rolls . .	3,960 58		
	———	$6,503 45	
Advertising		4 20	
Bricks, D. W. Lewis . . .		9 50	
Carpentry: —			
J. H. Keenan	47 43		
Kelley & McKinnon . .	38 70		
	———	86 13	
Electrical supplies, Pettingell-Andrews Co.		31 40	
Electrical work, W. S. Hill Electric Co.		14 76	
Engineers' supplies, W. A. Morrison		7 90	
Expressage, Hatch & Co. .		7 45	
Fire brick, clay, etc., D. W. Lewis		7 35	
Amounts carried forward .		$6,672 14	$13,200 00

Amounts brought forward .		$6,672 14	$13,200 00
For fuel, Richardson & Bacon,		4,556 05	
Gauges, Standard Thermometer Co.		85 00	
Gas, Cambridge Gas Light Co.		2 08	
Hardware, tools, and supplies: —			
American Steam Gauge Co.	$20 00		
Jos. Breck & Sons . . .	75		
Burditt & Bynner . . .	89 40		
Dodge, Haley & Co. . .	1 68		
Walworth Mfg. Co. . . .	13 94		
		125 77	
Hose, etc., Boston Woven Hose Co.		18 25	
Ice, Fresh Pond Ice Co. . .		47 75	
Lighting apparatus, Jordan, Marsh & Co.		19 00	
Lumber and cement, Geo. W. Gale Lumber Co. . . .		36 15	
Mason work: —			
Frank J. O'Riley . . .	59 15		
Stearns & Waterman . .	35 00		
		94 15	
Oil: —			
E. W. Bigelow & Co. . .	125 50		
Standard Oil Co.	9 66		
		135 16	
Painting, J. L. P. Ackers .		78 60	
Plumbing, Moynahan & Co.		42 50	
Stationery, Cotton & Gould .		10 25	
Sundries: —			
Geo. F. Blake Mfg. Co. .	1 00		
J. A. Holmes & Co. . .	4 50		
D. W. Lewis	4 75		
John Reardon & Sons . .	1 14		
		11 39	
Waste: —			
Samuel Kidder	10 53		
W. A. Morrison	25 59		
		36 12	
Wheelbarrow, A. J. Jones .		12 00	
Total			11,982 36
Balance unexpended . .			$1,217 64

SUMMARY OF EXPENDITURES.

Salaries of engineers, firemen, etc.	$6,503 45
Fuel	4,556 05
Miscellaneous	922 86
	$11,982 36

Water Works (Maintenance).

Cambridge Street.

Appropriation		$10,000 00
EXPENDED.		
For lead, Chadwick Lead Works	$330 00	
Pipe and castings, Donaldson Iron Co.	5,885 78	
Total		6,215 78
Balance unexpended		$3,784 22

Water Works (Maintenance).

Stony Brook Reservoir.

Appropriation			$1,000 00
EXPENDED.			
For gateman, Silas Baxter	$599 64		
Labor as per pay rolls	21 50		
		$621 14	
Fuel, G. F. Frost		16 11	
Paint, etc., J. L. P. Ackers		8 33	
Repairing wagon, Silas Baxter		10 88	
Sundries: —			
Burditt & Bynner	2 23		
G. F. Frost	1 40		
		3 63	
Teaming, W. E. Kingsbury		6 50	
Total			666 59
Balance unexpended			$333 41

Water Works (Interest on Water Loan).

Appropriation		$90,000 00
RECEIVED.		
For accrued interest on bonds .	$816 67	
Premium on bonds sold . .	22,323 00	
	23,139 67	
EXPENDED.		
For interest on Water Debt:—		
Coupons	63,970 00	
Registered	18,435 00	
Total		82,405 00
Balance unexpended . .		$7,595 00

Water Works (Rates, Fines, etc.).

RECEIVED.		
From sundry persons for water rates, fines, etc.	$257,882 00	
EXPENDED.		
For construction of Fresh Pond reservoir	34,000 00	
Interest on water debt . .	82,405 00	
Maintenance of Water Works	51,519 03	
Public sanitaries	825 44	
Abatement of rates, fines, etc.	4,739 67	
Refund of rates, fines, etc. .	1,993 66	
Sinking Fund requirements .	82,399 20	
		$257,882 00

Water Works (Rates, Fines, etc.).

Abatements.

Appropriation		$3,500 00
Additional appropriation		1,239 67
		4,739 67
EXPENDED.		
For abatements allowed on water rates		$4,739 67

Water Works (Rates, Fines, etc.)

Refunds.

Appropriation		$2.000 00
EXPENDED.		
For water rates refunded		1,993 66
Balance unexpended		$6 34

Water Works (Sinking Fund).

Appropriation		$65,152 50
Surplus receipts of Water Works		19,382 54
		84,535 04
Paid to trustees of Sinking Fund of Water Works	$65,152 50	
Surplus receipts	19,382 54	
Total		$84,535 04

Water Works (Supplies.)

Appropriation			$6,150 00
RECEIVED.			
For supply pipes, etc.		$5,703 85	
EXPENDED.			
For labor as per pay rolls		2,720 50	
Expressage		3 50	
Fittings, pipe: —			
Chapman Valve Mfg. Co.	$673 51		
Peet Valve Mfg. Co.	75 00		
Walworth Mfg. Co.	1,825 20		
		2,573 71	
Total			5,297 71
Balance unexpended			$852 29

Water Works (Supplies).

Abatements.

Appropriation	$200 00
EXPENDED.	
For abatement of supply bills	54 86
Balance unexpended	$145 14

Cambridge Water Works, in account with the City of Cambridge for the year ending November 30, 1894.

Receipts and Expenditures.

Balance in the City Treasury, to the credit of the Water Works, Nov. 30, 1893	$20,788 05	Expended for	
Received from sale of bonds	300,000 00	General Construction	$32,951 42
Premiums, accrued interest, etc	28,248 76	Fresh Pond Land	28,489 89
Rates, Fines, etc.	257,882 00	Fresh Pond Reservoir	65,632 06
Supplies	5,703 85	Hobbs Brook Reservoir	51,378 46
		Payson Park Reservoir	10,423 91
		Stony Brook Reservoir	442 32
		Interest on Water Debt	82,405 00
		Sinking Fund	84,535 04
		Maintenance	51,519 03
		Public Sanitaries	325 44
		Rates, Fines, etc., Abatements	4,739 67
		Rates, Fines, etc., Refunds	1,993 66
		Supplies	5,297 71
		Supplies Abatements	54 86
		Balance carried forward to credit of Water Works	191,934 19
	$612,622 66		$612,622 66

Recapitulation.

City Department Accounts.	Receipts.	Appropriations.	Expended.	Balances Unexpen'd.
Ambulance		$625 00	$625 00	
Assessors Department		11,000 00	10,919 65	$80 35
Auditing Department		4,000 00	3,983 67	16 33
Bridge Department	$597 81	12,800 00	12,120 69	679 31
Cemetery Department — Current Expenses, New Iron Fence	18,331 05	18,000 00	17,998 89	1 11
City Clerk Department	2,302 15	6,229 55	6,229 55	
City Messenger Department		2,800 00	2,587 54	212 46
Civil Service Department		225 00	224 50	50
Clerk of Committees Department		3,600 00	3,597 37	2 63
Election Expenses: City Clerk		4,900 72	4,900 72	
Registrars of Voters		3,800 00	3,584 86	215 14
Superintendent of Public Buildings		1,206 92	1,206 92	
Engineering Department	4,475 19	15,000 00	14,499 53	500 47
Bulkhead, Main Street		1,000 00	*779 97	220 03
Executive Department		4,900 00	4,825 08	74 92
Fire Department	185 65	73,000 00	72,488 69	511 31
Health Department		6,200 00	6,097 88	102 12
Incidental Expenses	8,588 58	15,466 05	15,348 28	117 77
Inspection of Milk and Vinegar Department	140 00	1,350 00	1,350 00	
Inspection of Provisions, etc.		800 00	756 06	43 94
Inspection of Wires	549 71	10,149 71	10,148 01	1 70
Interest	51,945 71	128,000 00	126,289 20	1,710 80
Lamp Department		69,000 00	68,988 81	11 19
Land Damages: Blackstone Street		*5,500 00	5,500 00	
Commercial Avenue		*11,614 75		11,614 75
Cushing Street		163 50	78 60	84 90
Davenport Street		1,990 00		1,990 00
Fairmont Avenue		700 00	700 00	
Huron Street		4,930 10	1,497 50	3,432 60
Main Street		2,090 00	2 090 00	
Mt. Auburn Street		*1,300 00	600 40	699 60
North Avenue		675 60	675 60	
Norton Street		*1,359 77	759 69	600 08
Wyeth Street		*11,714 99	10,482 09	1,232 90
Law Department	1,517 45	3,300 00	3,272 94	27 06
Overseers of the Poor Department: —				
Almshouse	1,930 65	21,930 65	21.838 56	92 09
Farm and Ledge	14,460 08	9,460 08	8,885 68	574 40
House Offal	8,218 96	24,218 96	24,133 42	85 54
Outside Aid	5,214 86	44,214 86	44,114 50	100 36
Almshouse Fire Protection		338 26	338 26	
Assistant City Physician		1,500 00	1,500 00	
Park Department: Construction	946 21	*412,946 21	251,259 24	161,686 97
Shade Trees and Public Grounds	17 19	8,017 19	7,016 85	1,000 34
Plumbers Examiners Department	114 00	200 00	119 95	80 05
Police Department	5,954 90	111,000 00	110,244 91	755 09
Public Library Department: —				
Current Expenses	4,761 31	14,761 31	14,720 88	40 43
Building		*20,000 00	15,154 74	4,845 26
Public Property: —				
City Buildings, Care and Repair	4,317 45	22,867 45	22,639 25	228 20
Incidentals		4,887 22	4,887 22	
Land for Engine House, Ward Five		*6,000 00	6,000 00	
Land for Latin School House		*45,000 00	43,911 45	1,088 55
Land for School House, Ward Three		*7,000 00	7,000 00	
New Engine House, Ward One		6,858 58	6,820 83	37 75
New Engine House, Ward Two		*19,000 00	6,987 76	12,012 24
New Engine House and Land, Ward Three	31,000 00	31,000 00	13,500 00	17,500 00
New Engine House, Ward Four		11,636 69	11,632 91	3 78
New School House, Ward Two		5,832 65	5,810 87	21 78
Amounts carried forward	$165,568 91	$1,268,061 77	$1,043 724 97	$224,336 80

* Appropriation provided for by loan.

Recapitulation. — *Continued.*

City Department Accounts.	Receipts.	Appropriations.	Expended.	Balances Unexpen'd.
Amounts brought forward	$165,568 91	$1,268,061 77	$1,043,724 97	$224,336 80
Public Property. — *Continued.*				
New School House and Land, Ward Five		*29,256 80	8,303 46	20,953 34
Sanitary Arrangements, Schools..		4,419 59	4,292 55	127 04
School Houses, Care and Repairs..		46,136 27	46,136 27	
School Department: —				
Incidentals.....		1,528 13	1,528 13	
Salaries	1,747 09	234,000 00	233,737 48	262 52
Text-Books, etc.....	246 34	13,000 00	12,999 49	51
Sealer of Weights and Measures Department	502 43	1,600 00	1,598 95	1 05
Sewer Department: —				
Construction	6,815 83	18,000 00	16,187 35	1,812 65
Maintenance	2,752 42	23,000 00	18,058 23	4,941 77
Metropolitan Sewer Connections.		*75,000 00	58,389 85	16,610 15
Sinking Fund Department		100,390 00	100,390 00	
State Aid.....	15,525 33	25,500 00	24,669 55	830 45
Stationery and Printing	879 49	2,739 13	2,739 13	
Street Department: —				
Bridges.....		3,950 00	3,949 48	52
Cleaning Streets		15,575 00	15,529 77	45 23
Collection of Ashes.....		16,850 00	16,840 35	9 65
Extension of Wyeth Street.....		*13,767 81	13,695 37	72 44
Maintenance	2,211 42	80,405 00	79,281 27	1,123 73
Paving: —				
Sidewalks	13,442 14	26,372 14	26,230 70	141 44
Western Avenue		10,390 00	10,387 53	2 47
Rebuilding Mt. Auburn Street....		*35,200 00	35,196 49	3 51
Resurfacing Brattle and Craigie Streets	13,000 00	13,000 00	8,841 89	4,158 11
Watering.....	12,468 49	23,460 04	23,450 28	9 76
Widening Davenport Street		1,010 00	534 38	475 62
Widening Harvard Street		*17,000 00	15,196 64	1,803 36
Widening Norton Street.....		*1,740 00	1,709 82	30 18
Treasury Department.....	1,677 54	12,677 54	12,542 01	135 53
	$236,837 43	$2,114,029 22	$1,836,141 39	$277,887 83

Water Department Accounts.	Receipts.	Appropriations.	Expended.	Balances Unexpen'd.
Water Works Department: —				
Construction (General Account)....	$1,239 00	*$41,239 00	$32,951 42	$8,287 58
Construction (Fresh Pond Land)....		*52,000 00	28,489 89	23,510 11
Construction (Fresh Pond Reservoir)		*69,700 00	65,632 06	4,067 94
Construction (Hobbs Brooks Reservoir)		*122,323 00	51,378 46	70,944 54
Construction (Payson Park Reservoir)	2,902 20	*158,202 20	10,423 91	147,778 29
Construction (Public Sanitaries)....		1,200 00	825 44	374 56
Construction (Stony Brook Reservoir)		1,861 43	442 32	1,419 11
Maintenance (General Account)	967 89	28,000 00	26,638 19	1,361 81
Maintenance (Office Expenses).....		6,025 00	6,016 11	8 89
Maintenance (Pumping)		13,200 00	11,982 36	1,217 64
Maintenance (Removal of main pipe in Cambridge Street, from Fifth Street to Fayette Street).		10,000 00	6,215 78	3,784 22
Maintenance (Stony Brook Reservoir)		1,000 00	666 59	333 41
Interest on Water Loan.....	23,139 67	90,000 00	82,405 00	7,595 00
Rates, Fines, etc.....	257,882 00			
Rates, Fines, etc. (Abatements).....		4,739 67	4,739 67	
Rates, Fines, etc. (Refunds).....		2,000 00	1,993 66	6 34
Sinking Fund		84,535 04	84,535 04	
Supplies	5,703 85	6,150 00	5,297 71	852 29
Supplies (Abatements).....		200 00	54 86	145 14
	$291,834 61	$692,375 34	$420,688 47	$271,686 87

*Appropriation provided for by Loan.

City Treasury.

DR.

To Cash in Treasury, December 1, 1893	$53,475 56	
Receipts as shown in the foregoing Statement (City Department Accounts)	236,837 43	
Receipts as shown in the foregoing Statement (Water Department Accounts)	291,834 61	
Amount received from Collector of Taxes for 1894	1,102,684 68	
Amount received from Collector of Taxes for other years	157,736 27	
Cemetery Fund	1,781 75	
Commissioners of Sinking Funds	130,000 00	
Loan, Building	118,000 00	
Loan, City	52,000 00	
Loan, Parks	360,000 00	
Loan, Sewer	75,000 00	
Loan, Street	30,000 00	
Loan, Temporary	125,000 00	
Loan, Water	300,000 00	
Tax, Corporation	61,211 35	
Tax, National Bank	16,480 92	
Tax Sale, Surplus	34 00	
Trustees of Sinking Fund of Water Works	186,000 00	
		$3,298,076 57

CR.

By Amount expended as shown in the foregoing Statement (City Department Accounts)	$1,836,141 39	
Amount expended as shown in the foregoing Statement (Water Department Accounts)	420,688 47	
Abatements (Taxes)	26,926 07	
Cemetery Fund	1,781 75	
Loan, Paving	130,000 00	
Loan, Temporary	125,000 00	
Loan, Water	186,000 00	
Tax Sale, Surplus	108 27	
Tax, County	68,110 25	
Tax, National Bank	7,372 24	
Tax, State	62,280 00	
Tax, Metropolitan Sewer	45,483 43	
		2,909,891 87
Balance in Treasury		$388,184 70

Schedule of Real Estate Owned by the City of Cambridge, as shown on the Assessors' Books Nov. 30, 1893.

Cambridge Cemetery: —			
$60\frac{1}{10}$ acres of land		$60,000	
2 houses		12,500	
			$72,500
Cambridge Public Library: —			
135,621 feet of land		67,000	
Library Building		100,000	
			167,000
Fire Department: —			
Hook and Ladder No. 2, Portland Street	$12,000		
11,931 feet of land	3,000		
		15,000	
Engine House No. 5, junction Cambridge and Hampshire Streets.	10,000		
6,000 feet of land	3,000		
		13,000	
Police Station, Fourth Street	20,000		
4,220 feet of land	2,100		
		22,100	
Engine House, cor. Otis and Third Streets: —			
Building	14,000		
5,250 feet of land	4,000		
		18,000	
Engine House No. 4 and stable, North Avenue	7,000		
6,516 feet of land	3,000		
		10,000	
Engine House No. 6, River Street	12,000		
4,994 feet of land	2,500		
		14,500	
Engine House E. S. Lexington Ave.	11,000		
15,262 feet of land	3,500		
		14,500	
Engine House, Front Street	26,000		
10,000 feet of land	8,000		
		34,000	
			141,100
Pauper Department: —			
$14\frac{242}{1000}$ acres of land		11,000	
Almshouse buildings		25,000	
			36,000
Amount carried forward			$416,600

Amount brought forward .			$416,600
Public buildings and lands: —			
City Hall (new) Main Street . . .	$200,000		
47,878 feet of land	72,000		
		$272,000	
City Hall (old) Main Street . . .	10,000		
12,881 feet of land	19,300		
		29,300	
Ward One Building, Mt. Auburn Street	60,000		
16,153 feet of land	16,000		
		76,000	
Ward Four Building, Green Street .	50,000		
13,028 feet of land	10,500		
		60,500	
Stables, sheds, and scales, Hampshire Street	17,000		
72,661 feet of land	30,000		
		47,000	
Lot N. S. Spruce Street, 4,000 feet .		100	
Park, Boylston, Mt. Auburn, and Winthrop Streets, 10,236 feet of land .		8,000	
Park, S. S. Broadway, 107,181 ft. land		54,000	
Park, Hastings Square, 30,000 ft. land		9,000	
Public buildings and lands: —			
Park, Dana Square, 33,531 feet land		12,000	
Park, Pleasant Street, 1,372 feet land		1,000	
Park, Pleasant, River, Cottage, and Kinnaird Streets, 1,569 feet land.		1,200	
Fort Washington, E. S. Waverly Street, 42,123 feet of land . . .		8,000	
Mill Pond Property, N. S. River, W. S. Blackstone, 70,684 feet .		29,000	
Lot, S. S. Porter Street, 3,578 . .		700	
Lot, E. S. Portland Street, 18,011 ft.		5,500	
8 lots, E. S. Norfolk Street, 39,600 ft.		12,000	
Lot, Second Street, 26,400		5,200	
Lot, W. S. Reed Street, 1,500 feet .		100	
2 lots, Walden Street, 16,365 feet . .		1,000	
Lot, N. S. River Street, 2,282 feet .		700	
Wharf, S. S. Main Street, 9,400 feet .		7,300	
Flats, S. S. Main Street, 162,000 feet		7,600	
Common, Garden, North Avenue, and Waterhouse Streets, 370,785 feet .		150,000	
Amounts carried forward .		$797,200	$416,600

Amounts brought forward . . .		$797,200	$416,600
Park, North Avenue, Kirkland and Cambridge Streets, 33,357 feet North Avenue and Harvard Square, 23,074 feet Park, North Avenue, and Holmes Place, 20,956 feet		77,000	
Park, Spruce, and Cleveland Streets, 501,729 feet		30,047	
Lot, W. S. Blackstone, Western Ave. and Ampere Street, 19,934 feet . .		5,600	
Mill Pond property, S. S. Western Avenue, n. Howard, 210,185 feet .		42,000	
Ward 3, Charles River Parkway, 452,910 feet		20,500	
Ward 4, Charles River Parkway, 2,164,636 feet		86,500	
Ward 2, Charles River Parkway, 468,729 feet		63,800	
Triangular lot, Main and Arrow Streets, 872 feet		800	
Burial ground, North Avenue and Garden Street, 85,858 feet . . .			
Triangular lot, Chauncy and Garden Streets, 3,189 feet		1,500	
Buildings and land, N. S. Bridge . .		1,000	
		———	1,125,947

SCHOOL HOUSES AND LANDS.

Ward One.

New High School, Broadway . . .	$220,000		
74,366 feet of land	37,000		
	———	257,000	
Washington Grammar, Brattle Street	30,000		
14,951 feet of land	7,000		
	———	37,000	
Corlett Grammar, Holworthy Street .	3,000		
10,000 feet of land	1,000		
	———	4,000	
Manual Training School, Broadway, Irving and Felton Streets . . . Land, 73,128 feet		36,200	
Amounts carried forward . . .		$334,200	$1,542,547

Amounts brought forward . . .		$334,200	$1,542,547
Agassiz Primary, Sacramento Street .	$18,000		
19,689 feet of land	6,000		
		24,000	
Cushing Primary, Cushing Street . .	3,000		
14,787 feet of land	1,500		
		4,500	
Dunster Primary, Concord Avenue .	4,000		
10,000 feet of land	2,000		
		6,000	
Holmes Primary, Hilliard Street . .	6,000		
11,182 feet of land	4,500		
		10,500	
Lowell Primary, Lowell Street . . .	7,000		
12,033 feet of land	2,500		
		9,500	
Quincy Primary, Mason Street . . .	10,000		
8,469 feet of land	5,000		
		15,000	
Riverside Primary, Putnam Avenue .	5,000		
11,198 feet of land	3,000		
		8,000	

Ward Two.

Latin High, Fayette Street	40,000		
37,828 feet of land	15,000		
		55,000	
Old Latin High, Lee Street	10,000		
10,100 feet of land	5,000		
		15,000	
Wellington Training, Columbia Street	16,000		
18,870 feet of land	5,700		
		21,700	
Allston Grammar, Boardman Street .	18,000		
15,193 feet of land	4,600		
		22,600	
Harvard Grammar, Inman Street . .	40,000		
20,494 feet of land	12,000		
		52,000	
Bridge Primary, Pioneer Street . .	500		
4,646 feet of land	1,400		
		1,900	
Dana Primary, Centre Street . . .	2,000		
14,317 feet of land	4,300		
		6,300	
Amounts carried forward . . .		$586,200	$1,542,547

Amounts brought forward . . .		$586,200	$1,542,547
Felton Primary, Amory Street . . .	$6,000		
15,090 feet of land	4,500		
		10,500	
Gannett (old) Primary, Columbia St. .	2,000		
8,803 feet of land	2,500		
		4,500	
Gannett (new) Primary, Jefferson St.	12,000		
15,434 feet of land	3,000		
		15,000	
Sargeant Primary, Broadway . . .	3,000		
9,995 feet of land	4,000		
		7,000	
Stearns Primary, Harvard Street . .	3,000		
10,050 feet of land	5,000		
		8,000	
Parker Primary, S. S. Broadway . .	15,000		
12,329 feet of land	7,000		
		22,000	
Ward Three.			
Putnam Grammar, Fourth and Otis Streets	60,000		
11,900 feet of land	8,300		
		68,300	
Thorndike Grammar, Thorndike St. .	30,000		
10,027 feet of land	4,000		
		34,000	
Gore Primary, Gore Street	25,000		
9,900 feet of land	4,000		
		29,000	
Lassell Primary, Charles Street . .	8,000		
10,000 feet of land	2,500		
		10,500	
Otis Primary, Otis Street	12,000		
8,270 feet of land	4,000		
		16,000	
Ward Four.			
Webster Grammar, Upton Street . .	50,000		
25,839 feet of land	9,000		
		59,000	
Boardman Primary, Winsor Street .	12,500		
10,018 feet of land	4,000		
		16,500	
Amounts carried forward . . .		$886,500	$1,542,547

Amounts brought forward . . .		$886,500	$1,542,547
Tarbell Primary, Grigg Street . . .	$8,000		
19,500 feet of land	4,000		
		12,000	
Willard Primary, Lake Street . . .	20,000		
20,079 feet of land	5,000		
		25,000	
Morse School House on Allston and Brookline Streets	73,000		
25,650 feet of land	7,000		
		80,000	
Ward Five.			
Peabody Grammar, Linnæan Street .	27,000		
21,813 feet of land	8,000		
		35,000	
Shepard Grammar, North Avenue .	20,000		
14,755 feet of land	7,000		
		27,000	
Reed Primary, Reed Street	4,000		
12,000 feet of land	1,200		
		5,200	
Wyman Primary, Spruce Street . .	6,000		
14,347 feet of land	3,500		
		9,500	
			1,080,200
Sewer Department:—			
23,707 feet of land, Pilgrim Street .		5,900	
Stables, shed, house, and building .		4,100	
			10,000
Water Works:—			
House, shop and stables S. S. Concord Avenue	4,000		
$27\frac{33}{100}$ acres of land	16,700		
		20,700	
Land, S. S. Concord Avenue, $\frac{5}{8}$ acre		300	
Land, E. S. Woodlawn Avenue, 15,735 feet		800	
Lot, rear of Grove Street, 272,800 ft.		2,000	
Lot, S. S. Concord Avenue, 99,000 feet		1,000	
Land, S. S. Concord Avenue, 11,220 feet		100	
Amounts carried forward		$24,900	$2,632,747

Amounts brought forward . . .	$24,900	$2,632,747
Water Works: —		
Two lots, S. S. Concord Avenue, 219,400 feet	2,200	
Gate-house lot, Concord Avenue, 43,560 feet	400	
Lot, S. S. Concord Avenue, 24,100 feet	300	
Fresh Pond Lane, 11¼ acres of land	11,000	
Kingsley Park, Fresh Pond Lane, 309,336 feet	8,000	
Lot, rear Fresh Pond Lane, 364,608 feet	3,500	
Lot, Woodlawn Avenue, 107,616 ft.	8,000	
Lot, Woodlawn Avenue, 26,989 ft.	1,600	
Lot, rear Fresh Pond Lane, 239,541 feet	5,000	
Lot, Woodlawn Avenue, 91,040 ft.	2,000	
Lot, Holworthy Street, 18,480 feet .		
Lot, W. S. Cushing Street, 22,348 ft.	700	
Lot, E. S. Cushing Street, 41,053 ft.	800	
Lot, Cushing Street, cor. Woodland Avenue, 95,482 feet	2,000	
Lot, Woodland Avenue, 24,096 feet	1,900	
Lot, E. S. Cushing St., 222,750 ft. } Lot, E. S. Cushing St., 416,800 ft. land }	4,000	
Two lots, near Fresh Pond and Adams Place, 110,891 feet . .	1,000	
Land, Adams Place, 55,275 feet . } 105,322 feet . . . . . }	1,400	
Lot, Woodlawn Avenue, 25,216 feet of land	1,200	
Land, Woodlawn Avenue, 133,379 feet	11,500	
Gravel pit, S. S. Concord Avenue, 397,417 feet	3,000	
190,500 feet of land Adams Street .	4,300	
Lot, W. S. Cushing Street, 91,112 feet	500	
Near Concord Avenue, 4½ acres . .	5,000	
Adams Place, 419,222 feet of land .	10,000	
S. S. Concord Avenue, 10,805 feet of land	500	
Amounts carried forward . . .	$114,700	$2,632,747

Amounts brought forward . . .		$114,700	$2,632,747
Water Works:—			
S. S. Concord Avenue, 32,425 feet of land		700	
S. S. Concord Avenue, 62,000 feet of land		1,200	
Lot, Adams Street, 1¾ acres . . .		1,000	
Concord Avenue, 294,000 feet of land		3,000	
Tudor Park, near Concord Avenue, 57,312 feet of land			
Pumping Station, Worthington St. 90,414 feet of land		61,000	
One house and stable, Lexington Avenue, Lake View Avenue and Vassal Lane, 88,077 feet of land .		14,100	
Reservoir, Reservoir Street, 91,003 feet of land		18,000	
Two houses, stable and sheds and building, S. S. Auburn Street . .	5,700		
33,300 feet of land	6,600		
	———	12,300	
Lot, Grove Street, 150,000 feet . .		1,500	
Land and buildings, Grove Street, 519,000 feet		11,000	
		———	238,500
Total			$2,871,247

The following is a schedule of property used for religious, charitable, and educational purposes, and exempt from taxation by law, not including that owned by the City of Cambridge, as shown on the Assessors' Books November 30, 1894.

Exempted Property.

Ward One.

Christ Church, Episcopal, Garden Street: —		
Church	$12,000 00	
22,701 feet of land . .	12,000 00	
		$24,000 00
First Parish Church, Unitarian: —		
Church, North Avenue .	20,000 00	
14,764 feet of land . .	22,000 00	
		42,000 00
Cambridge Social Union: —		
House, No. 42 Brattle Street	5,000 00	
$\frac{13}{22}$ of hall	7,000 00	
9,030 feet of land . . .	6,700 00	
		18,700 00
Epworth M. E. Church: —		
Church, North Avenue .	80,000 00	
11,248 feet of land . .	10,000 00	
		90,000 00
Old Cambridge Baptist Society: —		
Church, Main and Harvard Streets	86,000 00	
34,573 feet of land . .	24,000 00	
		110,000 00
Shepard Congregational Society: —		
Church, Garden Street .	106,000 00	
34,556 feet of land . .	21,000 00	
		127,000 00
St. Peter's, Roman Catholic: —		
Concord Avenue . . .	45,000 00	
32,000 feet of land . .	10,000 00	
		55,000 00
Amount carried forward		$466,700 00

Amount brought forward		$466,700 00
St. Paul's Roman Catholic: —		
Mt. Auburn Street . .	$30,000 00	
11,216 feet of land . .	8,000 00	
		38,000 00
St. Paul's Catholic School Association: —		
Personal property . .	1,500 00	
School building . . .	55,000 00	
House, Arrow and Mt. Auburn Streets . .	7,000 00	
29,091 feet of land . .	15,000 00	
		78,500 00
Cambridge Hospital: —		
Personal property . .	122,491 24	
Building, Mt. Auburn St.	60,000 00	
412,487 feet of land . .	50,000 00	
		232,491 24
Longfellow Memorial Association: —		
Personal property . .	15,765 94	
Park, S. S. Brattle Street, 93,618 feet	46,000 00	
		61,765 94
Episcopal Theological School, Trustees of: —		
Personal property . .	134,014 10	
Chapel, seminary, dormitories, Brattle and Mason Streets, and Hastings Avenue . .	239,185 39	
Two houses, Hawthorne and Acacia Streets .		
Two houses, Mason and Phillips Place . .		
		373,199 49
Avon Home, Mt. Auburn Street: —		
Building	22,000 00	
69,751 feet of land . .	13,700 00	
Personal property . .	36,218 00	
		71,918 00
Amount carried forward		$1,322,574 67

Amount brought forward		$1,322,574 67	
Society for the Collegiate Instruction of Women: —			
Personal property . .	$156,000 00		
Two houses, laboratory and gymnasium, Garden and Mason Streets	40,500 00		
43,558 feet of land . .	30,000 00		
		226,500 00	
The Corporation of the New Church Theological School: —			
Personal property . .	67,200 00		
Two houses and stable, 42–48 Quincy Street .	16,000 00		
82,880 feet of land . .	48,000 00		
		131,200 00	
President and Fellows of Harvard College: —			
Personal property . .	5,621,925 00		
Dormitories, chapels, laboratories, museums, lecture rooms and houses, including Ward Five property .	2,823,180 00		
		8,445,105 00	
			10,125,379 67
	Ward Two.		
Baptist Church, Trustees of funds of: —			
Chapel, Hampshire St. .	$3,000 00		
2,560 feet of land .	800 00		
		$3,800 00	
Broadway Bap. Church: —			
Church, W. S. Boardman Street	30,000 00		
11,620 feet of land . .	8,000 00		
		38,000 00	
Cambridgeport Unitarian Society: —			
Church, N. S. Austin Street	18,000 00		
13,116 feet of land . .	8,000 00		
		26,000 00	
Amounts carried forward		$67,800 00	$10,125,379 67

Amounts brought forward		$67,800 00	$10,125,379 67
Harvard Street M. E. Society: —			
Church, N. S. Harvard Street	$22,000 00		
10,030 feet of land . .	8,000 00		
		30,000 00	
St. Paul's A.M.E.Church: —			
Church, N. S. Hastings Street	2,000 00		
5,386 feet of land . . .	2,000 00		
		4,000 00	
Hope Congregational Church: —			
Church, N. S. Harvard Street	8,000 00		
6,000 feet of land . .	3,000 00		
		11,000 00	
First Evangelical Congregational Society: —			
Church, W. S. Prospect Street	40,000 00		
19,153 feet of land . .	12,000 00		
		52,000 00	
First A. M. E. Society: —			
House, 108 Hastings Street	600 00		
1,616 feet of land . .	500 00		
		1,100 00	
First Universalist Society of Cambridge: —			
Church, E. S. Inman Street	20,000 00		
15,312 feet of land . .	11,300 00		
		31,300 00	
St. Mary's Parochial School: —			
Church, W. S. Norfolk, corner Harvard Street	45,000 00		
Girls' School, S. S. Harvard Street	60,000 00		
Boys' School, E.S. Essex Street	18,000 00		
Sisters' Home, 50 and 52 Essex Street . . .	7,000 00		
57,428 feet of land . .	20,000 00		
Amounts carried forward		$197,200 00	$10,125,379 67

Amounts brought forward		$197,200 00	$10,125,379 67
St. Mary's Parochial School:—			
Theatre, E. S. Norfolk Street	$15,000 00		
13,032 feet of land	6,500 00		
Gymnasium, E. S. Prospect Street	35,000 00		
11,370 feet of land	5,600 00		
House, 55 Norfolk Street	7,500 00		
7,500 feet of land	2,300 00		
		221,900 00	
UnionM.E.Church,Trs.of:—			
661, 663 Main St.2 houses	2,800 00		
6,347 feet of land	12,600 00		
		15,400 00	
UnionM.E.Church,Trs.of:—			
659 Main Street, 1 house	5,500 00		
4,992 feet of land	10,000 00		
		15,500 00	
Cambridge Home for Aged People, 157 Hancock Street:—			
Personal property	30,807 41		
12,094 feet of land	6,000 00		
One house	7,000 00		
		43,807 41	
St. Bartholomew's Church, W. S. Columbia Street	6,000 00		
5,562 feet of land	1,500 00		
		7,500 00	
St. Luke's Reformed Episcopal Church, N. S. Harvard, corner of Inman Street:—			
6,250 feet of land	4,700 00		
Church building	9,000 00		
		13,700 00	
First United Presbyterian Church:—			
S. S. Camb. St., church,	6,000 00		
9,173 feet of land	4,600 00		
		10,600 00	
Salvation Army, E. S. Prospect Street:—			
Barracks		4,000 00	
			529,607 41
Amount carried forward			$10,654,987 08

Amount brought forward			$10,654,987 08
	Ward Three.		
First Methodist Episcopal Church : —			
Church, Cambridge, corner Third Street . .	$25,000 00		
5,000 feet of land . .	12,500 00		
		$37,500 00	
Mass. Baptist Convention, Tr. : —			
Church, Cambridge and Fourth Streets . . .	25,000 00		
6,000 feet of land . . .	10,000 00		
		35,000 00	
Mission of the Ascension :			
Church, Third and Thorndike Streets . .	5,000 00		
5,000 feet of land . .	4,000 00		
		9,000 00	
Second Universalist Society :			
Church, Otis Street . .	16,000 00		
5,000 feet of land . .	3,000 00		
		19,000 00	
St. John's Church : —			
Church, Fourth Street .	5,000 00		
5,000 feet of land . . .	3,000 00		
		8,000 00	
Church of the Sacred Heart : —			
Church, Sixth, Otis, and Seventh Streets . .	70,000 00		
30,000 feet of land . .	12,000 00		
		82,000 00	
Middlesex County Buildings : —			
Court House, Third, Otis, and Thorndike Streets	70,000 00		
Registry of Deeds, Second, Otis, and Third Sts. .	175,000 00		
60,000 feet of land . .	36,000 00		
		281,000 00	
Amounts carried forward		$471,500 00	$10,654,987 08

Amounts brought forward		$471,500 00	$10,654,987 08
House of Correction, Jail, and shops, Thorndike, Third, Spring, and Second Streets	$250,000 00		
60,000 feet of land . .	24,000 00		
		274,000 00	
St. John Lit. Institute: —			
Hall and stores, Cambridge Street, ⅔ value .	20,000 00		
½ of 6,300 feet of land .	4,700 00		
Cash assets	1,000 00		
		25,700 00	
			771,200 00
	Ward Four.		
Cambridge Young Men's Christian Association: —			
Personal property . .	$2,078 28		
Building, 622–624 Main Street	8,000 00		
Land	8,000 00		
		18,078 28	
Charles River Baptist Church: —			
Church, E. S. Magazine Street	25,000 00		
11,250 feet of land . .	3,000 00		
		28,000 00	
First Baptist Society: —			
Church, Central Square .	80,000 00		
21,200 feet of land . .	20,000 00		
		100,000 00	
Grace M. E. Church: —			
Church, E. S. Magazine Street	15,000 00		
7,700 feet of land . .	5,000 00		
		20,000 00	
Massachusetts Baptist Convention — Union Baptist Church: —			
Church, 452 Main Street	10,000 00		
3,900 feet of land . .	2,800 00		
		12,800 00	
Amounts carried forward		$178,878 28	$11,426,187 08

Amounts brought forward		$178,878 28	$11,426,187 08
Pilgrim Congregational Church: —			
Church, W. S. Magazine Street	$30,000 00		
8,885 feet of land . .	7,500 00		
		37,500 00	
Baptist Home, 168 and 170 Brookline Street, one house and stable . . .	20,000 00		
Personal	3,671 06		
		23,671 06	
Protestant Episcopal Church, Trustees of Donations to: —			
Church, S.S. Main Street (St. Peter's) . . .	10,000 00		
9,229 feet of land . . .	9,000 00		
		19,000 00	
East End Union Mission: —			
Church, W. S. Brewery Street, on Rogers' land		3,500 00	
Rush African M. E. Zion Church: —			
Church, S.S. School Street	6,000 00		
2,760 feet of land . .	1,100 00		
		7,100 00	
St. Phillip's Church, Episcopal: —			
Church, N. S. Allston Street	3,000 00		
4,686 feet of land . .	1,200 00		
		4,200 00	
Wood Memorial Church, Congregationalist: —			
Church, W. S. Columbia, corner Austin Street .	30,000 00		
7,500 feet of land . .	4,000 00		
		34,000 00	
			307,849 34
Ward Five.			
Catholic Cemetery, Spruce Street, 304,014 feet . .		$30,000 00	
Amounts carried forward		$30,000 00	$11,734,036 42

Amounts brought forward		$30,000 00	$11,734,036 42
North Avenue Congregational Society: —			
Church, North Avenue	$30,000 00		
13,430 feet of land . .	6,500 00		
		36,500 00	
Porter's Station Depot, North Avenue, Fitchburg Railroad Company . .		2,000 00	
Third Universalist Society:			
Church, North Avenue .	30,000 00		
11,958 feet of land . .	6,000 00		
		36,000 00	
St. James' Episcopal Society: —			
Church and chapel, North Avenue and Beech Street	75,000 00		
21,207 feet of land (cemetery lot included) .	10,000 00		
		85,000	
Abbott, Edward, Trustee for W. S. Beech: —			
Lot, 7,965 feet . . .		2,400 00	
North Avenue Baptist Society: —			
Church, North Avenue .	55,000 00		
38,873 feet of land . .	15,000 00		
		70,000 00	
Williams, John J., S. S. Spruce Street: —			
School house	40,000 00		
20,000 feet of land . .	3,000 00		
		43,000 00	
Marist Fathers of Boston French Roman Catholic Church: —			
Church, N. S. Harvey St.,	30,000 00		
21,645 feet of land . .	3,000 00		
		33,000 00	
			337,900 00
			$12,071,936 42

REPORT OF THE COMMITTEE ON ACCOUNTS.

CAMBRIDGE, December 28, 1894.

The joint standing Committee on Accounts for the year 1894 respectfully submits its annual report, as required under the provisions of the City Ordinances.

During the year your Committee has had frequent meetings, and has duly examined all claims against the city, as approved by the City Auditor, and compared them with his record.

The prescribed examination has been made of his books and accounts, and the committee desires to commend the accuracy and neatness with which they have been kept.

ANDREW J. RADY,
PETER P. BLEILER,
J. WALTER FARRELL,
RANDOLPH C. SURBRIDGE,
} *Committee on Accounts.*

REPORT OF THE COMMITTEE ON FINANCE.

The Committee on Finance for the year 1894 herewith submits its annual report.

The annual financial estimates, with the usual accompanying orders, were reported in February last, as provided by ordinance.

The aggregate amounts were as follows : —

Appropriations and Revenue, 1894.

TOTAL ESTIMATE OF REVENUE.

City Department accounts	$153,350 00	
Water Department accounts	217,002 50	
Other revenue	284,475 56	
Grand total		$654,828 06

TOTAL AMOUNT OF APPROPRIATIONS REPORTED.

City Department accounts	$1,852,290 38	
Water Department accounts	628,863 93	
Grand total		2,481,154 31

GENERAL RECAPITULATION.

Total estimated expenses as before stated	$2,481,154 31	
Allowance for estimated uncollected taxes of the year 1894, remaining uncollected as of November 30, 1894	150,000 00	
		2,631,154 31
Less estimated revenue before given		654,828 06
Balance to be provided for		$1,976,326 25

The Committee recommended that this amount be provided for as follows : —

1. By the issue of City Bonds, viz. : —		
Building Loan, Public Library	$20,000 00	
Park Loan, Parks	412,000 00	
Sewer Loan, Metropolitan	75,000 00	
Street widening, Harvard Street	17,000 00	
		$524,000 00
Amount carried forward		$524,000 00

Amount brought forward	$524,000 00
2. By the issue of Water Loan Bonds, viz.: — Water Works Construction	390,000 00
3. By assessment upon the polls and estates of the inhabitants of Cambridge, etc., for the current year, being amount required for municipal expenses for the year (the State tax and County tax to be assessed by the assessors, by authority of law, in addition hereto)	1,062,326 25
Total	$1,976,326 25

In accordance with the foregoing, the Committee recommended the adoption of the accompanying orders: —

CITY OF CAMBRIDGE,
IN COMMON COUNCIL, Feb. 20, 1894.

Ordered, That the sum of *One Million and Sixty-two Thousand, Three Hundred and Twenty-six Dollars and Twenty-five Cents* ($1,062,326 25) be raised by assessment upon the polls and estates of the inhabitants of the City of Cambridge and the estates of non-resident proprietors, according to law, to defray the current expenses of the city for the financial year beginning December 1, 1893, and ending November 30, 1894.

CITY OF CAMBRIDGE,
IN COMMON COUNCIL, Feb. 20, 1894.

Ordered, That the sums following be and are hereby appropriated towards defraying the expenses of the City of Cambridge for the financial year beginning December 1, 1893, and ending November 30, 1894.

Total amount of appropriations	$2,481,154 31

Various additions were made to these appropriations, and several special appropriations were from time to time recommended by the Committee, full details of which may be found in the report of the City Auditor, to which reference is also made for particulars concerning the city loans authorized during the year, on this committee's recommendation.

The usual sub-committee, which consisted of President Conant of the Common Council, Alderman Rady, and Councilman Odiorne, was appointed to examine the condition of the City Treasury at the close of business on Friday, November 30.

This sub-committee submitted the following report: —

CITY OF CAMBRIDGE, December 27, 1894.

To the Committee on Finance:

GENTLEMEN: — The sub-committee appointed to count and examine the cash in the hands of the City Treasurer at the close of business on Nov. 30, 1894, would respectfully report.

Nov. 30, 1894. Actual cash in City Treasurer's office was		$1,060 47
Also, a certificate from W. A. Bullard, Cashier of First National Bank of Cambridge, showing a balance (at close of business on Nov. 30, 1894) to the credit of the City Treasurer of . . .	$421,594 26	
From this balance should be deducted certain checks given by the City Treasurer prior to Nov. 30, 1894, but not received by the above bank at that time, amounting to	4,147 27	
Leaving a balance in above bank, as shown by City Treasurer's books Nov. 30, 1894 of . .		417,446 99
Also, a certificate from E. H. Norris, Assistant-Cashier of Charles River National Bank of Cambridge, showing a balance (at close of business Nov. 30, 1894) to the credit of the City Treasurer of		50,948 69
Also, a certificate from Louis W. Cutting, Treasurer of the Cambridge Safe Deposit and Trust Co. of Cambridge, showing a balance (at close of business Nov. 30, 1894) to the credit of the City Treasurer of		50,264 55
Making the total cash on hand		519,720 70
Dec. 17, 1894. After the above examination by your Committee, certain additional entries belonging to the financial year of 1894 were made, the receipts and expenditures which these same represent being as follows: —		
RECEIPTS.		
City Clerk's fees, received after close of business Nov. 30, 1894	19 80	
Amount necessary to adjust error in receipts for account of Overseers of Poor — Outside Aid Department, as of Oct. 25, 1894	01	
From Commonwealth of Massachusetts Account of Overseers of Poor — Almshouse Department	333 33	
Amounts carried forward	$353 14	$519,720 70

Amounts brought forward	$353 14	$519,720 70
From Commonwealth of Massachusetts		
Account of Overseers of Poor — Outside Aid Department	352 52	
Account of Corporation Tax	58,985 14	
Account of State Aid	15,196 39	
Account of National Bank Tax, being amount received for stocks of Massachusetts Banks outside of Cambridge, owned by Cambridge residents	16,269 66	
Total		91,156 85
Which amount added to City Treasurer's balance of Nov. 30, 1894 as above, makes a total of .		610,877 55

EXPENDITURES.

Authorized additional payments as of Nov. 30, 1894, verified by your committee are as follows: —		
Pay rolls for the last six days in November, 1894	8,299 69	
State Tax for year 1894	62,280 00	
Metropolitan Sewer Tax, being amount paid on account of the Metropolitan Sewer for interest, Sinking Fund, and Maintenance charges thereof, Assessment for Cambridge for the year 1894	45,483 43	
National Bank Tax, refunding of taxes on non-resident owners of stock in Cambridge Banks	7,372 24	
For one-quarter part of receipts from liquor licenses received during the financial year of 1894, paid to State Treasurer	12 25	
Surplus in running account of the Water Works Department, paid to the Trustees of Sinking Funds of Cambridge Water Works	19,382 54	
Loan — Paving. Amount held by City Treasurer to meet payment of ten (10) bonds of above issue, maturing in 1894, but not yet presented for redemption	10,000 00	
Loan — Water. Amount held by City Treasurer to meet payment of one (1) bond of above issue, maturing in 1894, but not yet presented for redemption	1,000 00	
Amount credited to cash necessary to correct certain errors in receipts of Water Works Department — Rates, Fines, etc., account . . .	45	
Total		153,830 60
Showing a balance of cash in City Treasurer's hands as of Nov. 30, 1894, of		$457,046 95

Your committee would further state that we carefully examined the drafts made by the Mayor during the financial year of 1894 on the City Treasurer, and found the aggregate to be		$2,889,573 17

CEMETERY FUND.

Your committee also examined the trust fund called the "Cemetery Fund" for the perpetual care of lots in the Cambridge Cemetery, the assets of which are in the custody of the City Treasurer, verifying the investments thereof which are as follows:—

Book No. 21,716 in Cambridge Savings Bank, amount of deposit	1,255 32	
Book No. 21,926 in Cambridgeport Savings Bank, amount of deposit	4,438 82	
City of Cambridge bonds at par, amounting to .	26,000 00	
Total assets as of Nov. 30, 1894		$31,694 14

ANDREW J. RADY,
CHAS. M. CONANT,
JOHN L. ODIORNE,
} *Sub-Committee.*

These pages being intended to embrace only a brief statement in reference to such financial doings of the City Council, as were carried forward under the recommendations of this committee, all details of figures have been avoided, as properly belonging to the report of the City Auditor. Many important matters have been under consideration before the committee, several of which, relating to extensive public improvements, are still pending, and will therefore go over to the next year.

JOHN G. THOROGOOD,
JOHN H. PONCE,
ANDREW J. RADY,
RUSSELL BRADFORD.
CHARLES M. CONANT,
ARTHUR M. STEWART,
THOMAS F. DOLAN,
ALFRED B. PARKER,
JOHN L. ODIORNE,
WILLIAM T. McGUIRE,
} *Committee on Finance.*

REPORT OF THE CITY TREASURER.

Office of City Treasurer, December 1, 1894.

To the Honorable the City Council : —

In the following pages I submit a detailed report of the receipts and expenditures of the public funds by the Treasury Department, during the year ending November 30, 1894, including an account of all bonded and temporary loans negotiated in said year.

Very respectfully,

WM. W. DALLINGER,

City Treasurer.

CITY OF CAMBRIDGE IN ACCOUNT CURRENT FROM DECEMBER 1, 1893, TO

Dr.

To authorized payments charged to City Accounts as follows:—	
Abatements, Taxes	$26,926 07
Assessors' Department	10,897 63
Auditing Department	3,960 21
Bridge Department	12,084 42
Cemetery Department	18,080 76
Cemetery Fund	1,781 75
City Clerk's Department	6,171 09
City Messenger's Department	2,579 57
Civil Service Department	224 50
Clerk of Committee's Department	3,600 58
Election Expenses:—	
City Clerk	4,860 93
Registrars of Voters	3,571 10
Superintendent of Buildings	1,330 10
Engineering Department:—	
Bulk-Head, Main Street	779 97
Current Expenses	14,481 16
Executive Department	4,829 83
Fire Department	72,980 44
Health Department	5,950 69
Incidental Expenses	15,282 11
Incidental Expenses, Park Commissioners	207 47
Inspection of Milk and Vinegar Department	1,371 95
Inspection of Provisions Department	645 23
Inspection of Wires Department	10,009 87
Interest	126,289 20
Lamp Department	69,033 11
Land Damages:—	
Blackstone Street	5,500 00
Cushing Street	78 60
Fairmont Avenue	700 00
Huron Street	1,497 50
North Avenue	675 60
Norton Street	759 69
Mount Auburn Street	600 40
Wyeth Street	10,462 09
Law Department	3,210 02
Loan:—	
Paving	130,000 00
Temporary	125,000 00
Water	186,000 00
Overseers of the Poor:—	
Almshouse Department	22,120 07
Almshouse Fire Protection	479 67
Assistant City Physician Salary	1,500 00
Farm and Ledge Department	8,768 50
House Offal Department	24,244 06
Outside Aid Department	43,496 22
Park Department:—	
Construction	247,939 86
Shade Trees and Public Grounds	6,538 96
Plumbers Examiner's Department	24 95
Police Department	109,409 67
Public Library Department:—	
Building	13,800 15
Current Expenses	13,650 39
Public Property:—	
City Buildings	20,935 87
School Houses	45,011 26
Incidentals	4,869 17
Bridge School House	797 22
Manual Training School	136 35
New High School House	90 77
Old High School House	16 55
Wellington School House	7 10
Sanitary Arrangements, School Houses	4,841 84
Land for New Engine House, Ward 5	6,000 00
Land for New Latin School House	43,911 45
Land for New School House, Ward 3	7,000 00
Amount carried forward	$1,508,003 72

Nov. 30, 1894 (inclusive), with Wm. W. Dallinger, City Treasurer.

Cr.

Receipts as follows: —	
Bridge Department	$ 597 81
Cemetery Department	18,331 05
Cemetery Fund	1,781 75
City Clerk's Department	2,302 15
Commissioners of Sinking Funds	130,000 00
Engineering Department	4,475 19
Fire Department	185 65
Incidental Expenses	8,588 58
Inspection of Milk and Vinegar Department	140 00
Inspection of Wires Department	549 71
Interest	51,945 71
Law Department	1,517 45
Loan: —	
Building	118,000 00
City	52,000 00
Park	360,000 00
Sewer	75,000 00
Street	30,000 00
Temporary	125,000 00
Water	300,000 00
Overseers of the Poor: —	
Almshouse Department	1,930 65
Farm and Ledge Department	14,460 08
House Offal Department	8,218 96
Outside Aid Department	5,214 86
Park Department: —	
Construction	946 21
Shade Trees and Public Grounds	17 19
Plumbers Examiner's Department	114 00
Police Department	5,954 90
Public Library Department, Current Expenses	4,761 31
Public Property: —	
City Buildings	4,317 45
New Engine House, Ward 3	31,000 00
School Department: —	
Salaries	1,747 09
Text-Books and Supplies	246 34
Sealer of Weights and Measures Department	502 43
Sewer Department: —	
Construction	6,815 83
Maintenance	2,752 42
State Aid Department	15,525 33
Stationery and Printing Department	879 49
Street Department: —	
Maintenance	2,211 42
Paving, Edgestones and Sidewalks	13,442 14
Resurfacing Brattle and Craigie Streets	13,000 00
Watering	12,468 49
Tax: —	
Corporation	61,211 35
National Bank	16,480 92
Tax Sale Surplus	34 00
Taxes: —	
1891	377 35
1892	6,717 20
1893	150,641 72
1894	1,102,684 68
Treasury Department	1,677 54
Trustees of Sinking Funds of Water Works	186,000 00
Amount carried forward	$2,952,766 40

CITY OF CAMBRIDGE IN ACCOUNT CURRENT FROM DECEMBER 1, 1893, TO

Dr.

Amount brought forward	$1,508,003 72
Public property: —	
Land for New School House, Ward 5	4,256 80
New Engine House, Ward 1	6,911 83
New Engine House, Ward 2	6,952 16
New Engine House, Ward 3	13,501 37
New Engine House, Ward 4	12,296 31
New School House, Ward 2	6,136 44
New School House, Ward 5	4,046 66
Police Station, Ward 3	75 00
School Department: —	
Incidentals	1,187 63
Salaries	233,737 48
Text Books and Supplies	16,255 37
Sealer of Weights and Measures Department	1,593 72
Sewer Department: —	
Construction	15,651 91
Maintenance	18,131 85
Metropolitan Sewer Connections	57,283 57
Sinking Fund Department	100 390 00
State Aid Department	24,588 75
Stationery and Printing Department	2,765 83
Street Department: —	
Bridges	3,892 95
Cleaning Streets	14,681 73
Collection of Ashes	16,315 63
Construction and Repairs	841 25
Extension of Wyeth Street	11,659 16
Maintenance	75,983 74
Paving: —	
Edgestones and Sidewalks	24,689 24
Western Avenue	10,387 53
Rebuilding Mount Auburn Street	34,301 77
Resurfacing Brattle and Craigie Streets	3,078 75
Watering	24,918 53
Widening Davenport Street	226 81
Widening Harvard Street	15,196 64
Widening Main Street	2,090 00
Widening Norton Street	1,709 82
Tax: —	
County	68,110 25
Metropolitan Sewer	45,483 43
National Bank	7,372 24
State	62,280 00
Tax Sale Surplus	108 27
Treasury Department	12,351 52
Water Works Department: —	
Construction: —	
General Account	34,912 69
Fresh Pond Land Account	28,509 89
Fresh Pond Reservoir	72 750 12
Hobbs Brook Reservoir	48,567 55
Payson Park Reservoir	8,251 00
Public Sanitaries	62 81
Stony Brook Water Supply	442 32
Interest on Water Loan	82,405 00
Maintenance: —	
General Account	27,171 61
Office Expenses	6,005 64
Pumping	11,807 20
Removal of Pipe in Cambridge Street	2,216 32
Stony Brook Reservoir	635 10
Rates, Fines, etc.: —	
Abatements	4,739 67
Refunds	1,993 66
Sinking Funds	84 535 04
Supplies	5,067 03
Abatements	54 86
Total Payments	$2,889,573 17
Cash balance in City Treasury, November 30, 1894	457,046 95
	$3,346,620 12

NOV. 30, 1894 (INCLUSIVE), WITH WM. W. DALLINGER, CITY TREASURER.

Cr.

Amount brought forward	$2,952,766 40
Water Works Department: —	
Construction: —	
General Account	1,239 00
Payson Park Reservoir	2,902 20
Interest on Water Loan	23,139 67
Maintenance: —	
General Account	967 89
Rates, Fines, etc.	257,882 00
Supplies	5,703 85
Total Receipts	$3,244,601 01
Cash balance in City Treasury, November 29, 1893	102,019 11
	$3,346,620 12

Sale of Bonds.

During the year the City Council has authorized the issuance of loans for great public improvements to an unusual amount.

For the inauguration of our park system, the extension of our water supply, as well as street widening and rebuilding, and the erection of needed public buildings, bonds running from ten to thirty years have been issued to the amount of $935,000. And in the orders authorizing and directing these several loans to be issued, the City Treasurer was directed to bargain and sell the same. Accordingly he now submits a detailed report of the duty entrusted to him.

On the twenty-third day of January, 1894, I sold to the Cambridge Safe Deposit and Trust Company $110,000 of Park Loan four per cent. bonds, dated February 1, 1894, and payable February 1, 1924, for par and six and eighty-nine one hundredths per cent. premium, their bid being the highest of the sixteen received.

On the twenty-fourth day of February I sold to the same Trust Company $250,000 of Park Loan bonds, four per cents., dated February 1, 1894, payable February 1, 1924, for par and seven and fifty-five hundredths per cent. premium, their bid being the highest of the eleven received.

On the twenty-first day of April I sold $300,000 of four per cent. Water Loan bonds, dated April 1, 1894, payable April 1, 1924, to Messrs. Lee, Higginson & Co. and Messrs. R. L. Day & Co. ($150,000 to each firm) for par and seven and four hundred and forty-one thousandths per cent. premium. For this loan, or some portion of it, twelve bids were received, and the two firms to whom it was awarded were the highest bidders.

On the eighth day of August I sold to Leland, Towle & Co. $118,000 of four per cent. Building Loan bonds, dated August 1, 1894, and payable August 1, 1914, for par and six and one hundred seventy-five thousandths per cent. premium, and to the same party $75,000 of four per cent. Sewer Loan bonds, dated August 1, 1894, payable August 1, 1924, for par

and eight and thirty-five thousandths per cent. premium; this firm's bid for the two loans being the highest of the eight received.

On the fourteenth day of September, I sold to the First National Bank of Cambridge $52,000 of four per cent. City Loan bonds, dated August 1, 1894, payable August 1, 1904, for par and three and ten one-hundredths per cent. premium. And to the same bank, $30,000 of four per cent. Street Loan bonds, dated August 1, 1894, payable August 1, 1914, for par and five and forty-four hundredths per cent. premium; both bids being the highest received.

All the foregoing loans were issued in coupon form, and the premium received was exceptionally large.

Only one Temporary Loan note was issued in the year, which was for $125,000 dated January 9, 1894, and made payable October 10, 1894. This note was written bearing interest at the rate of three and one-fourth per cent. per annum, and was sold to the Commissioners of the Sinking Funds of the City of Cambridge.

Respectfully,

WM. W. DALLINGER,

City Treasurer.

REPORT OF THE COMMISSIONERS OF THE SINKING FUNDS OF THE CITY OF CAMBRIDGE.

To the Honorable the City Council: —

The undersigned, Commissioners of the Sinking Funds of the city, herewith present their nineteenth annual report, covering the year ending November 30, 1894.

DR.

The amount of the funds Nov. 30, 1893 . . .	$632,815 14	
Amount received from the City of Cambridge as the annual appropriation required by law for 1894	100,025 00	
Amount of interest received on invested funds .	25,589 58	
		$758,429 72

CR.

Amount paid as accrued interest on investments purchased	26 67	
Amount paid as premium on investments purchased	114 00	
Amount given to Treasurer of Cambridge to meet maturing bonds, viz.: —		
Paving Loan, six per cent. bonds, maturing July 1, 1894	130,000 00	
Leaving the amount of the funds Nov. 30, 1894	628,289 05	
		758,429 72

SECURITIES BELONGING TO THE SINKING FUNDS NOV. 30, 1894.

Cambridge Sewer Loan, six per cent. bonds, due Oct. 1, 1895	$1,000 00
Cambridge Sewer Loan, six per cent. bonds, due July 1, 1896	12,000 00
Cambridge Street Widening Loan, six per cent. bonds, due July 1, 1904	90,000 00
Cambridge Sewer Loan, six per cent. bonds, due July 1, 1904	2,000 00
Amount carried forward	$105,000 00

Amount brought forward	$105,000 00	
Cambridge Street Widening Loan, six per cent. bonds, due July 1, 1905	14,000 00	
Cambridge Sewer Loan, six per cent. bonds, due July 1, 1905	49,000 00	
		$168,000 00
Town of Brookline, $3\frac{65}{100}$ per cent. bonds, due Feb. 1, 1895	1,000 00	
City of Brockton, four per cent. bonds, due July 1, 1895	2,500 00	
City of Keene, N. H., four per cent. bonds, due July 1, 1895	1,000 00	
City of Somerville, four per cent. bonds, due July 1, 1895	12,000 00	
City of Dayton, four per cent. bonds, due Oct. 1, 1895	7,000 00	
Town of Hyde Park, four per cent. bonds, due Nov. 1, 1895	2,000 00	
City of Dayton, four per cent. bonds, due Oct. 1, 1896	7,000 00	
Town of Hyde Park, four per cent. bonds, due Nov. 1, 1896	2,000 00	
City of Fitchburg, four per cent. bonds, due Nov. 1, 1896	2,000 00	
City of Waltham, four per cent. bonds, due Jan. 1, 1897	6,000 00	
City of New Bedford, $3\frac{1}{2}$ per cent. registered bond, due April 1, 1897	15,000 00	
City of Dayton, four per cent. bonds, due Oct. 1, 1897	7,000 00	
Town of Hyde Park, four per cent. bonds, due Nov. 1, 1897	2,000 00	
City of Fitchburg, $3\frac{1}{2}$ per cent. registered bonds, due April 1, 1898	10,000 00	
City of Cleveland, four per cent. bonds, due Sept. 1, 1898	1,000 00	
City of Dayton, four per cent. bonds, due Oct. 1, 1898	4,000 00	
City of Providence, $4\frac{1}{2}$ per cent. bonds, due June 1, 1899	64,000 00	
City of Cleveland, $3\frac{65}{100}$ per cent. bonds, due Sept. 1, 1902	1,000 00	
City of Lawrence, four per cent. bonds, due July 1, 1904	12,000 00	
City of Pawtucket, four per cent. bonds, due July 1, 1904	15,000 00	
Town of Hopkinton, four per cent. bonds, due Sept. 30, 1904	5,000 00	
Amounts carried forward	$178,500 00	$168,000 00

Amounts brought forward	$178,500 00	$168,000 00
City of Pawtucket, four per cent. bonds, due July 1, 1909	30,000 00	
Town of Beverly, four per cent. bonds, due July 1, 1911	9,000 00	
City of Brockton, 3½ per cent. bonds, due July 1, 1916	5,000 00	
		222,500 00
		390,500 00
Cash balance deposited in sundry banks on interest		237,789 05
		$628,289 05

The bonded city debt which the foregoing sinking funds are to pay, matures as follows, viz.: —

April 1, 1895, Municipal Loan bonds, four per cent.	$200,000 00
July 1, 1895, Paving Loan bonds, six per cent.	25,000 00
Oct. 1, 1895, Sewer Loan bonds, six per cent.	20,000 00
July 1, 1896, Sewer Loan bonds, six per cent.	29,000 00
Nov. 1, 1896, Sewer Loan bonds, 3½ per cent.	25,000 00
Aug. 1, 1898, City Hall Land Loan bonds, four per cent. . .	83,000 00
Nov. 1, 1899, Street Widening Loan bonds, four per cent. . .	8,000 00
May 1, 1900, High School Loan bonds, four per cent.	100,000 00
Jan. 1, 1901, High School Loan bonds, four per cent. . . .	100,000 00
July 1, 1901, High School Loan bonds, four per cent. . . .	10,000 00
July 1, 1901, School House Loan bonds, four per cent. . . .	50,000 00
July 1, 1901, Bridge Loan bonds, four per cent.	15,000 00
May 2, 1902, Street Loan bonds, four per cent.	55,000 00
May 2, 1902, Building Loan bonds, four per cent.	20,000 00
Nov. 1, 1902, Paving Loan bonds, four per cent.	50,000 00
Nov. 1, 1902, School House Loan bonds, four per cent. . . .	20,000 00
July 1, 1903, Sewer Loan bonds, six per cent.	136,000 00
July 1, 1903, Street Widening Loan bonds, six per cent. . . .	10,000 00
Nov. 1. 1903, Building Loan bonds, four per cent.	40,000 00
July 1, 1904, Sewer Loan bonds, six per cent.	295,000 00
July 1, 1904, Street Widening Loan bonds, six per cent. . . .	90,000 00
Aug. 1, 1904, City Loan bonds, four per cent.	52,000 00
July 1, 1905, Sewer Loan bonds, six per cent.	144,000 00
July 1, 1905, Street Widening Loan bonds, six per cent. . . .	14,000 00
Aug. 1, 1905, Cemetery Loan bond, four per cent.	65,000 00
Nov. 1, 1907, Sewer Loan bonds, four per cent.	30,000 00
Nov. 1, 1909, Sewer Loan bonds, four per cent.	22,000 00
May 1, 1910, Sewer Loan bonds, four per cent.	15,000 00
July 1, 1911, Sewer Loan bonds, four per cent.	15,000 00
Aug. 1, 1914, Building Loan bonds, four per cent.	118,000 00
Amount carried forward	$1,856,000 00

Amount brought forward	$1,856,000 00
Aug. 1, 1914, Street Loan bonds, four per cent.	30,000 00
Oct. 1, 1917, Harvard Bridge Loan bond, four per cent.	10,000 00
July 1, 1918, Harvard Bridge Loan bonds, four per cent.	100,000 00
Sept. 1, 1918, Harvard Bridge Loan bonds, four per cent.	50,000 00
Sept. 1, 1918, Harvard Bridge Loan bonds, four per cent.	50,000 00
March 1, 1919, Harvard Bridge Loan bonds, four per cent.	90,000 00
March 1, 1919, Harvard Bridge Loan bonds, four per cent.	25,000 00
Nov. 1, 1920, Harvard Bridge Loan bond, four per cent.	5,000 00
July 1, 1921, Harvard Bridge Loan bond, four per cent.	60,000 00
Aug. 1, 1923, Harvard Bridge Loan bonds, four per cent.	10,000 00
Feb. 1, 1924, Park Loan bonds, four per cent.	360,000 00
Aug. 1, 1924, Sewer Loan bonds, four per cent.	75,000 00
	$2,721,000 00

CAMBRIDGE, December 11, 1894.

To the Board of Commissioners of the Sinking Funds of the City of Cambridge: —

Your committee appointed to audit the accounts of the Treasurer of the Funds respectfully reports that it finds his books well kept, and his accounts carefully cast and properly vouched. His vouchers accurately show the amount of cash received during the year from taxation, interest, and for matured bonds, and also the amount paid for redemption of City Debt and for bonds purchased for the Funds, including accrued interest and premium. A careful computation of these items, made independently of the Treasurer's books, proves that the present amount of the Funds as shown by his report is correct. The transactions of the Treasurer and Sub-committee on investment during the year have been as follows: —

Amount of bonds in the funds, Nov. 30, 1893	$434,500 00	
Amount of bonds purchased during the year	12,000 00	
	$446,500 00	
Amount of bonds matured during the year	56,000 00	
Amount of bonds in the funds Nov. 30, 1894		$390,500 00
Amount carried forward		$390,500 00

Amount brought forward . . .			$390,500 00
Cash on hand Nov. 30, 1893 . .	$198,315 14		
Cash received from the city derived from taxation	100,025 00		
Cash received for interest on investments	25,589 58		
Cash received for matured bonds .	56,000 00		
		$379,929 72	
Cash paid to redeem city debt . .	130,000 00		
Cash paid for bonds purchased . .	12,000 00		
Cash paid for accrued interest . .	26 67		
Cash paid for premium on bonds purchased	114 00		
		142,140 67	
			237,789 05
Cash deposited in Boston Safe Deposit & Trust Co.		200,189 05	
Cash deposited in Cambridge National Bank		35,231 72	
Cash deposited in First National Bank of Cambridge		2,368 28	
		$237,789 05	
Amount of funds Nov. 30, 1894 .			$628,289 05

FRANK A. ALLEN,
JOHN C. BULLARD, } *Auditing Committee.*

The past year shows a large increase of the city debt, and city bonds (four per cents) have been issued for the same to the amount of $635,000.00, for the following purposes, viz. : —

Park Loan bonds to the amount of $360,000.00, dated Feb. 1, 1894, payable in thirty years.

Building Loan bonds to the amount of $118,000.00, dated Aug. 1, 1894, payable in twenty years.

Street Loan bonds to the amount of $30,000.00, dated Aug. 1, 1894, payable in twenty years.

City Loan bonds to the amount of $52,000.00, dated Aug. 1, 1894, payable in ten years.

Sewer Loan bonds to the amount of $75,000.00, dated Aug. 1, 1894, payable in thirty years.

City bonds to the amount of $130,000.00, (six per cents) issued July 1, 1874, matured July 1, and were paid from this fund. The total amount of the city debt proper, now outstanding, is $2,721,000.00, from which deducting the present assets of the Sinking Fund at their par value, $628,289.05, leaves the net liability for bonded debt, Nov. 30, 1894, (ex-

clusive of the water debt), $2,092,710.95, showing an increase of debt for the year, of $509,526.09, or nearly 33⅓ per cent. It will be seen that the larger portion of this increase is on account of the park system recently adopted by our city. The valuation of the city as returned by the assessors for 1894 is $77,535,620, showing an increase over 1893 of $1,253,931.00. The net debt is now about 2⅝ per cent. of the present valuation of the city. There will be due the fund from taxation for 1895, the sum of $113,775.00.

Respectfully submitted,

CHAS. H. SAUNDERS,
FRANK A. ALLEN,
JOHN C. BULLARD,
ANDREW J. LOVELL,
HENRY O. HOUGHTON,
GEO. H. HOWARD.

Commissioners of the Sinking Funds of the City of Cambridge.

CAMBRIDGE, December 11, 1894.

REPORT OF THE TRUSTEES OF THE SINKING FUND OF THE CAMBRIDGE WATER WORKS.

To the Honorable the City Council: —

The undersigned, Trustees of the Sinking Fund of the Cambridge Water Works, herewith submit their annual report of the fund committed by law to their charge: —

DR.

Amount of the fund Nov. 30, 1893	$686,867 26	
Received during the year as follows: —		
From the treasurer of the City of Cambridge the annual appropriation from the water rates .	65,152 50	
Also from the same source the surplus remaining at the close of the year in the maintenance accounts of the Water Works	19,382 54	
From interest on investments	26,702 75	
		$798,105 05

CR.

Amount paid as accrued interest on investments purchased	20 30	
Amount paid the City Treasurer of Cambridge to meet maturing Water bonds	186,000 00	
Balance representing the amount of the fund Nov. 30, 1894	612,084 75	
		798,105 05

SECURITIES BELONGING TO THE SINKING FUND OF THE WATER WORKS, NOV. 30, 1894.

Cambridge Water Loan, six per cent. bonds, maturing April 1, 1895	$37,000 00
Cambridge Water Loan, 3½ per cent. registered bonds, maturing April 1, 1896	100,000 00
Cambridge Water Loan, 3½ per cent. registered bonds, maturing July 1, 1896	75,000 00
Cambridge Water Loan, six per cent. bonds, maturing July 1, 1896	66,000 00
Amount carried forward	$278,000 00

Amount brought forward	$278,000 00	
Cambridge Water Loan, six per cent. bonds, maturing July 1, 1897	16,000 00	
Cambridge Water Loan, five per cent. bonds, maturing July 1, 1898	12 500 00	
Cambridge Harvard Bridge Loan, four per cent. bond, maturing Nov. 1, 1920	5,000 00	
Cambridge Contingent Loan, four per cent. note, dated Dec. 1, 1883	200,000 00	
		$511,500 00
City of Boston, four per cent. bonds, maturing Jan. 1, 1899	5,000 00	
City of Lynn, four per cent. bonds, maturing July 1, 1899	11,000 00	
City of Boston, four per cent. bonds, maturing April 1, 1900	4,000 00	
City of Cleveland, $3\frac{65}{100}$ per cent. bonds, maturing Sept. 1, 1902	3,000 00	
City of Providence, five per cent. bonds, maturing July 1, 1906	50,000 00	
		73,000 00
		$584,500 00
Cash in bank on interest		27,584 75
		$612,084 75

The bonded water debt which the foregoing fund is to pay, matures as follows, viz.: —

April 1, 1895, six per cent. coupon	$160,000 00
April 1, 1896, $3\frac{1}{2}$ per cent. registered (or to April 1, 1911)	100,000 00
July 1, 1896, six per cent. coupon	103,000 00
July 1, 1896, $3\frac{1}{2}$ per cent. registered (or to July 1, 1911)	75,000 00
July 1, 1897, six per cent. coupon	16,000 00
July 1, 1898, five per cent. registered	12,500 00
Nov. 1, 1906, $3\frac{1}{2}$ per cent. registered	43,000 00
Oct. 1, 1907, four per cent. registered	75,000 00
Oct. 1, 1907, four per cent. registered	15,000 00
Nov. 1, 1907, four per cent. registered	22,000 00
July 1, 1908, four per cent. coupon	46,000 00
Aug. 1, 1908, four per cent. coupon	25,000 00
July 1, 1909, four per cent. coupon	20,000 00
May 1, 1910, four per cent. registered	133,000 00
May 1, 1910, four per cent. coupon	155,000 00
July 1, 1910, four per cent. coupon	75,000 00
Sept. 1, 1910, four per cent. coupon	125,000 00
Jan. 1, 1911, four per cent. coupon	20,000 00
Amount carried forward	$1,220,500 00

Amount brought forward	$1,220,500 00
Oct. 1, 1911, four per cent. coupon	35,000 00
Jan. 1, 1912, four per cent. coupon	150,000 00
May 2, 1912, four per cent. coupon	75,000 00
Nov. 1, 1912, four per cent. coupon	45,000 00
Feb. 1, 1913, four per cent. coupon	100,000 00
Aug. 1, 1913, four per cent. coupon	35,000 00
Aug. 1, 1913, four per cent. registered	15,000 00
April 1, 1924, four per cent. coupon	300,000 00
	$1,975,500 00

WM. A. BANCROFT,
CHAS. M. CONANT,
WM. W. DALLINGER.
} *Trustees of the Sinking Funds of the Cambridge Water Works.*

REPORT OF THE TRUSTEES OF THE DOWSE INSTITUTE.

CAMBRIDGE, Dec. 27, 1894.

To the Honorable City Council of Cambridge: —

The Board of Trustees of the Dowse Institute respectfully reports that a course of four lectures, with two readings and two concerts, was given in Union Hall, Cambridgeport, beginning Nov. 14, 1893, and ending Jan. 9, 1894.

An attested copy of the accounts of the Treasurer is herewith transmitted, showing the amount of receipts and expenditures.

W. W. WELLINGTON,
W. A. BULLARD,
FRANK A. ALLEN,
WM. A. BANCROFT,
CHAS. M. CONANT.
} *Board of Trustees.*

W. A. Bullard, Treasurer, in account with

Dr.

To Balance		$373 34
City of Cambridge, interest on fund one year . .	$600 00	
Tickets to course of entertainments	1,025 25	
		1,625 25
		$1,998 59

DOWSE INSTITUTE.

	Cr.	
By Fursch Mardi Concert Co., for a concert	$250 00	
Remenzi Concert Co., for a concert	200 00	
T. W. Higginson, for a lecture	50 00	
Henry A. Clapp, for a lecture	75 00	
J. J. Hayes and musicians, for a reading	90 00	
Edmund Hudson, for a lecture	75 00	
J. W. Churchill, for a reading	100 00	
John B. DeMotte, for a lecture	75 00	
Cambridge Tribune, advertising	28 00	
Cambridge Chronicle, advertising	24 00	
Cambridge Press, advertising	21 00	
Cambridge News, advertising	21 00	
C. C. Parkyn, for circulars	20 00	
Harvard Printing Co., for printing	38 50	
Stamped envelopes, addressed	23 75	
F. M. Buffum, distributing circulars	15 75	
F. L. Beunke, distributing circulars	1 35	
Geo. E. French, distributing circulars	1 50	
H. F. Miller Piano Co., carting piano	7 00	
Lee Powers, use of lamps	3 00	
C. L. Russell, doorkeeper	8 00	
F. M. Buffum, doorkeeper	8 00	
A. T. Buffum, doorkeeper	8 00	
A. B. Bullard, ticket seller	8 00	
Union Hall Association, rent of hall	320 00	
		1,471 85
Balance		526 74
		$1,998 59

ATTEST : W. A. BULLARD, *Treasurer.*

REPORT OF THE TRUSTEES OF THE BRIDGE CHARITABLE FUND.

The Trustees of the Bridge Charitable Fund submits herewith the eighteenth annual report in relation to its foundation.

The amount actually belonging to this fund as of Nov. 30, 1893, as stated in the last annual report, was		$2,410 36
Interest to July 18, 1894	$97 37	
Less two thirds payable to the Overseers of the Poor, under the terms of the bequest	64 31	
Balance one third of the interest added to fund		33 06
Amount of fund as of July 19, 1894		$2,443 42

Inasmuch as the amount due the Overseers of the Poor has not been claimed by them for several years, the amount on deposit to the credit of the fund is larger by this difference.

The amount actually on deposit with interest to July 19, 1894, is	$3,113 83
Actual amount belonging to the fund	2,443 42
Amount due Overseers of the Poor	$670 41

Though entitled to two-thirds of the accruing interest, the Overseers of the Poor, have nevertheless preferred that this sum should be allowed to remain with the fund in charge of these Trustees, until by larger interest accumulations, the amount shall have become sufficiently large to be available for use.

This Board has little else to add to the last annual report. By slow accretions of interest, the comparatively humble gift of the kind-hearted donor has reached its present fair proportions. We may therefore confidently hope that at no distant period, the unfortunate and deserving poor of our city may begin to reap substantial benefit from this source.

WM. A. BANCROFT,
JOHN G. THOROGOOD,
CHAS. M. CONANT,
Trustees.

REPORT OF THE TRUSTEES OF THE SANDERS TEMPERANCE FUND.

The twenty-ninth annual report of this Board is respectfully submitted.

The history of the establishment and perpetuation of this fund has been repeated in the annual reports of the city from year to year, since its foundation. As stated in the last annual report, it is a legacy of the sum of $10,000, bequeathed by Charles Sanders, Esq., a philanthropic citizen of Cambridge. He died in the year 1864. An extract from his will embodying the bequest may also be found in the report of the year 1893. The amount of the bequest was formally accepted by the City Council, Oct. 5, 1864, and an ordinance adopted, establishing a Board of Trustees to take charge of the fund and carry out the wishes of the donor. The first Board of Trustees, consisted of Honorable Z. L. Raymond, Mayor; George S. Saunders, President of the Common Council; Charles F. Choate, Alderman; James M. Price, George B. Lothrop, of the Common Council.

The Board organized and adopted a series of by-laws, which have ever since been in operation. Under these laws the office of Missionary of the fund was established, to whom was to be paid the income derived from the interest upon the amount of the fund. Mr. Frederick Goodfellow, a well known temperance worker of that time, was appointed as the first Missionary, holding the position for two years. The duties have since been performed by several successors. The present incumbent, Mr. Alonzo Stewart, was appointed in the year 1875. This long accustomed and faithful Missionary has been continued in office by this Board. Through all these many years he has labored in season and out of season, with tireless zeal in behalf of the cause so dear alike to his heart, and to that of the

philanthropic donor of this bequest. It is a cheering comment upon the results of this Missionary effort in our city, that it has taken no steps backward upon the vital question of temperance reform, but has constantly moved in the right direction.

In his own report supplementary to this, our Missionary recites the history of his labors during the past year.

WM. A. BANCROFT,
JOHN G. THOROGOOD,
CHAS. M. CONANT,
} *Trustees.*

REPORT OF THE SANDERS TEMPERANCE FUND MISSIONARY.

CAMBRIDGE, January 10, 1895.

To the Trustees of the Sanders Temperance Fund : —

GENTLEMEN : — In accordance with my usual custom and your requirements, I hereby present the report of my labors for the past year.

I can record only the efforts put forth — the results are known to Him alone who, many years ago, inspired the founder of this fund to provide an advocate for the tried and tempted.

I have endeavored to carry out the wishes of that founder, whose earnest desire was, "To reform old drunkards, to prevent young drunkards, and to abolish as far as possible, the use of all intoxicating drinks."

In my daily attendance at the Police Court I have had personal interviews with 1,430 men and women arrested for drunkenness, or for crimes committed when under the influence of strong drink. In every case I have labored earnestly to impress upon their minds, not only the folly of their course, but its suicidal influence upon both body and mind, and its degrading effect upon their homes and their families.

My attendance at the jail and house of correction has been less frequent than in former years, owing to the irregularity of Sabbath services in their chapel; yet I have embraced every possible opportunity to be present and to evince my interest in the welfare of the inmates, and my earnest desire for their reformation. I have distributed among them 93,450 pages of religious and temperance reading, and have held services in the women's department whenever it has seemed advisable.

All this may appear like seed sown by the wayside, that is soon trodden under foot; but we have been commanded to sow

beside all waters, and have been told by inspired lips that, "He that goeth forth and weepeth, bearing precious seed, shall doubtless come again rejoicing, bringing his sheaves with him."

Very sure am I that this fund will never fail of being the instrument in the hand of God, of strengthening many young men against temptation; of raising many poor, degraded souls into a higher atmosphere, and of making whole many a marred and broken life.

Individual effort toward producing such results may seem small and of little worth, but when the whole is revealed in the light of eternity, we shall find that one redeemed life has influenced another life; and as each has awakened and vivified another a current has been set in motion that will never cease.

Indeed, the manifold and far-reaching influence of any good work can never be known in this life, neither can any report that I may offer be complete and truthful unless it takes in the compass of both time and eternity.

All of which is respectfully submitted.

ALONZO STEWART.

REPORT OF THE OVERSEERS OF THE POOR.

CENTRAL SQUARE BUILDING,
CAMBRIDGEPORT, Dec. 24, 1894.

To the Honorable, the City Council of the City of Cambridge : —

GENTLEMEN : — The annual report of the Overseers of the Poor for the year ending November 30, 1894, is herewith presented.

In March last the City Council re-elected Mr. William W. Burrage as an Overseer of the Poor for a term of five years.

In the report of last year the Board referred to the new fire-proof safety vault which had been erected by order of the City Government for the preservation of the valuable documents of this department.

The Overseers would now call attention to the great need of a change in the method of lighting this safe, and would respectfully ask that a more secure and less dangerous substitute than gas be employed. It is the opinion of the Board that an electric light should be used in place of the present gas lamp. There are so many valuable documents and records kept in this vault which could never be replaced, if once destroyed, that we can afford to run no risk by insecure lighting arrangements.

The prediction in our last report that a greater expenditure would be required the present year for the support of the outside poor in view of the depressed financial condition of the country seems to have been fully verified in the results as submitted in this report.

A careful examination of the expenditures and receipts shows the correctness of the estimates previously made by the Board of the appropriations needed for the various branches of this department.

In accordance with such estimates we asked at the beginning

of the financial year for an appropriation for this department of $5,000 in addition to the sum allowed last year. This extra appropriation we did not at first receive, and it became necessary for the City Council to furnish it later.

While the net cost of the care of the poor this year is only $920.31 in excess of what it was last year in consequence of the greater receipts, yet the gross expense has been about $5,000 in excess of last year.

In the month of September of the present year the truants sentenced to our care by the District Court were removed to the New Middlesex County Truant School at Chelmsford, where they are very comfortably situated and kindly cared for by Mr. Moses Warren, who gave up the position of Assistant Superintendent of the Cambridge Almshouse to assume the duties of the institution. In severing the connection which had so pleasantly continued for a period of years, the Board of Overseers passed a complimentary vote expressive of its appreciation of his services, and with the hope that success might attend his efforts in the new relation which he had assumed.

The ordinance passed by the City Council January 9, 1894, in reference to the committal of truants from Cambridge by the District Court to the Cambridge Almshouse, was repealed, and a new ordinance selecting the Middlesex County Truant School at Chelmsford was passed.

We have still in our custody at the Almshouse five neglected children through sentence of the Court under the provisions of former statutes. The laws respecting truants and neglected children have been revised by the Acts of 1894, Chapter 498. By the terms of the Law it would seem that Cambridge is required to make provision for neglected children as well as for truants (Ib. Section 26). There appears to be no ordinance or by-law of the city on this subject. Doubt has arisen respecting the proper place to which such children shall hereafter be sentenced in the absence of such provision, though it would seem that it is in the power of the judge to send them to the institution selected by the city for the care of its truants.

Separate appropriations, including in the totals the estimated

receipts, were made the past year by the City Council for the different branches of this department as follows: —

Outside Aid	$38,000 00
Almshouse	20,000 00
Farm and Ledge	8,000 00
House Offal	24,000 00
Additional appropriation for Outside Aid November, 1894	5,000 00
Assistant City Physician salary	1,500 00

The following were the actual expenditures and receipts for the year: —

OUTSIDE AID.

Expenditures	$44,114 50
Receipts	5,214 86
Net cost	$38,899 64

ALMSHOUSE.

Expenditures	$21,838 56
Receipts	1,930 65
Net cost	$19,907 91

FARM AND LEDGE.

Expenditures	$8,885 68
Receipts	14,460 08
Net gain	$5 574 40

ASSISTANT CITY PHYSICIAN.

Expenditures	$1,500 00

HOUSE OFFAL.

Expenditures	$24,133 42
Receipts	8,218 96
Net cost	$15,914 46

The number of persons at institutions for whose support the city is liable has been as follows: —

City Almshouse	296
State Lunatic Hospitals	159
State Almshouse	6
Baldwinville Hospital Cottages	1
Massachusetts School for the Blind	2
Massachusetts School for Feeble Minded	15
	479
Number of insane in families	9
	488

The insane hospital cases include 13 at the Danvers Lunatic Hospital, 73 at the Worcester Lunatic Hospital, 19 at the Worcester Insane Asylum, 1 at the Taunton Lunatic Hospital, 22 at the Westboro Lunatic Hospital, 11 at the Foxboro Dipsomaniac Hospital, 15 in the insane ward at the State Almshouse at Tewksbury, 5 in the insane ward at the State Farm at Bridgewater. Two insane men and seven insane women have been boarded out in families, nearly all under the supervision of the State Board of Lunacy and Charity. There have been 24 mildly insane cases at the Almshouse in addition to the number at the lunatic hospitals supported by the city.

The amount paid to the State Lunatic Hospitals and private families for the insane has been $19,506. The relatives of the insane and other persons supported by the city have paid $2,008.34 into the city treasury. Other cities and towns have reimbursed the city to the amount of $1,856.23 for aid rendered their poor living in Cambridge. The State Treasurer has paid $2,360.41 for the support of cases having no settlement which were aided from the office of the Board.

There have been 687 histories taken of new applicants for relief, and 94 histories have been revised, as appears from the report of the Visitor.

The Assistant City Physician has made 1,959 visits upon 110 patients in the Almshouse, and he has also made 2,158 visits upon 714 patients outside of the institution, as is seen by his report.

The improvements made last year at the Almshouse have proved that the expenditure authorized by the City Council was wise, judicious, and for the comfort, health, and security of the inmates.

There have been 294 inmates in the institution during the year, and there remained November 30, 117 persons, as appears in the report of the superintendent. Other details relating to the house, farm, ledge, and offal departments will be found in the superintendent's report.

Six hundred and thirty families embracing 1,890 persons have been aided from the office of the Board during the past year. One hundred of these families lived in Wards 1 and 5,

352 of them resided in Wards 2 and 4, and 178 of them lived in Ward 3.

RECAPITULATION.

Total expenditure for Outside Aid, Almshouse, Farm, and Ledge	$74,838 74
Receipts for the same	21,605 59
Net cost of care of the poor	$53,233 15

Respectfully submitted,

CHAS. E. VAUGHAN, *Chairman*,
CHARLES WALKER,
CHARLES BULLOCK,
STEPHEN ANDERSON,
WM. W. BURRAGE,
} *Overseers of the Poor.*

REPORT OF THE SUPERINTENDENT OF THE ALMSHOUSE.

CAMBRIDGE, December 1, 1894.

To the Overseers of the Poor : —

GENTLEMEN : — The annual report of the Almshouse for the year ending November 30, 1894, is herewith respectfully submitted.

The whole number in the Almshouse during the year has been as follows : —

Males	183
Females	113
Total	296
Adults	218
Minors	83
Whole number in the Almshouse Nov. 30, 1894	117
Average number during the year	119

Included in the whole number in the Almshouse Nov. 30, 1894, there are : —

INSANE OR DEMENTED.

Males	4
Females	20
Total	24

IDIOTIC OR IMBECILE.

Males	1
Females	4
Total	5

BLIND.

Males	4
Females	2
Total	6

Included in the whole number discharged during the year, there are : —

To Almshouse, Charlestown	2
Almshouse, Sandwich	2
Carney Hospital	2
Episcopal Home, South Boston	2
Essex County Truant School	1
Massachusetts School for Feeble Minded	1
Massachusetts State Home, Roxbury	1
Middlesex House of Correction	1
St. Mary's Infant Asylum	1
State Almshouse, Tewksbury	3
Westboro Lunatic Hospital	1
Worcester Lunatic Hospital	2

Remaining in the Almshouse Nov. 30, 1894 : —

Males	63
Females	54
Adults	104
Minors, boys, 6; girls, 7	13

Of the boys remaining Nov. 30, 1894, there are : —

Neglected children	3
Dependent children	3
Total	6

Of the girls remaining Nov. 30, 1894, there are : —

Neglected children	2
Dependent children	5
Total	7

The following tables will show the changes in population, the number of deaths during the year, an approximate estimate of the value of farm products, and a comparison of financial receipts for fourteen years ending Nov. 30, 1894 : —

Table I.

Showing the number and sex of adult persons and minors of all classes received into the Almshouse in each month of the year ending November 30, 1894.

Months.	Adults.		Minors.		Total.	Dependent Children.		Neglected Children.		Truant Children.	
1893.	*M.*	*F.*	*M.*	*F.*		*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
December	5	2	0	0	7	0	0	0	0	0	
1894.											
January	10	2	2	1	15	1	1	0	0	1	0
February	10	2	4	1	17	3	1	0	0	1	0
March	4	1	0	2	7	0	2	0	0	0	0
April	4	3	4	0	11	1	0	1	0	2	0
May	3	6	6	3	18	1	2	0	1	5	0
June	4	6	6	4	20	4	4	0	0	2	0
July	9	3	8	1	21	8	1	0	0	0	0
August	7	1	7	0	15	1	0	0	0	6	0
September	6	3	3	5	17	0	3	2	2	1	0
October	8	2	2	0	12	2	0	0	0	0	0
November	10	1	1	3	15	1	3	0	0	0	0
Totals	80	32	43	20	175	22	17	3	3	18	0

Table II.

Showing the number and sex of adult persons and minors of all classes discharged from the Almshouse in each month of the year ending November 30, 1894.

Months.	Adults.		Minors.		Total.	Dependent Children.		Neglected Children.		Truant Children.	
1893.	*M.*	*F.*	*M.*	*F.*		*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
December.....	5	2	0	1	8	0	1	0	0	0	0
1894.											
January	6	2	1	2	11	0	1	0	1	1	0
February	6	3	5	3	17	4	2	0	1	1	0
March	6	3	1	2	12	1	2	0	0	0	0
April.....	15	5	4	0	24	1	0	1	0	2	0
May.	8	6	5	1	20	0	1	0	0	5	0
June.....	6	1	5	2	14	2	2	1	0	2	0
July.....	4	5	4	2	15	4	2	0	0	0	0
August	7	4	10	2	23	4	2	0	0	6	0
September.....	2	1	2	0	5	1	0	0	0	1	0
October.....	5	2	2	4	13	1	3	1	1	0	0
November	9	2	3	3	17	2	3	1	0	0	0
Totals	79	36	42	22	179	20	19	4	3	18	0

Table III.

Showing the name, age, time of admission, date and cause of death of each person who has died in the Almshouse during the year ending November 30, 1894.

Names.	Age.	Date of Admission.	Date of Death.	Cause of Death.
Edward Doherty.....	65	Dec. 9, 1890	Dee. 10, 1893	Paliomyelitis.
Patriek P. Sullivan...	44	Jan. 24, 1894	Jan. 30, 1894	Catarrhal Pneumonia.
John Rhinebergher...	63	Jan. 29, 1894	Jan. 30, 1894	Heart Disease.
Margaret Hurlihy	77	June 23, 1882	Feb. 24, 1894	Heart Disease.
Mary Cosgrove.....	61	May 31, 1883	Mar. 20, 1894	Chronie Bronchitis.
Mary Lewis	18	April 3, 1894	April 8, 1894	Heart Disease.
Joseph Greer.....	92	July 5, 1876	April 27, 1894	Apoplexy.
Margaret Croft.....	42	May 18, 1894	May 26, 1894	Purpura Hemorrhagica.
Nieholas Stout.....	73	Oct. 5, 1888	May 27, 1894	Chronic Nephritis.
Mary Day	79	Mar. 14, 1891	June 3, 1894	Apoplexy.
Margaret Flynn	6 weeks	June 4, 1894	June 12, 1894	Infantile Convulsions.
Thomas Goodwin	75	May 7, 1891	June 22, 1894	Consumption.
Margaret Shugrue	79	June 13, 1893	July 16, 1894	Senile Debility.
Mary Keating.....	86	Oet. 24, 1889	July 31, 1894	Senile Debility.
Mary E. Clark.....	16	Mar. 29, 1894	Aug. 11, 1894	Nephritis.
Henry W. Nicholson..	47	Dee. 22, 1893	Aug. 18, 1894	Phthisis.
Miehael Murphy.....	91	Oct. 29, 1889	Aug. 30, 1894	Apoplexy.
Martin MeLaughlin ..	65	July 27, 1894	Oet. 23, 1894	Apoplexy.
James Giblin.....	35	Oet. 20, 1894	Oct. 27, 1894	Consumption.
Frank T. Fenner	43	Feb. 9, 1891	Oet. 31, 1894	Apoplexy.
James M. Burgess	47	Nov. 3, 1894	Nov. 4, 1894	Pneumonia.
William Blakey.....	83	Oet. 26, 1894	Nov. 7, 1894	Cerebral Compression.
Nancy DeWent	76	Jan. 29, 1894	Nov. 8, 1894	Pneumonia.
Catharine Arkerson...	81	July 23, 1890	Nov. 9, 1884	Cerebral Compression.

Products of the Farm.

480 bushels beans	$490 00
750 bushels beets	500 00
250 bushels beet greens	80 00
14,000 cabbages	700 00
160 bushels carrots	80 00
600 boxes celery	2,100 00
40 boxes celery plants	28 00
20,000 cucumbers	330 00
260 bushels dandelion greens	250 00
150 dozen green corn	15 00
2 tons hay	30 00
900 dozen lettuce	200 00
200 bushels onions	120 00
25 boxes parsley	40 00
500 bushels parsnips	550 00
100 bushels peas	125 00
8,373 pounds pork	573 73
40 bushels potatoes	40 00
300 dozen radishes	130 00
2,800 pounds rhubarb	95 00
250 bushels spinach	90 00
5 tons squash	100 00
700 bushels tomatoes	400 00
	$7,066 73

Comparative Table of Almshouse, Farm, Ledge, and House Offal Receipts for Fourteen Years ending November 30, 1894.

Years.	Board.	Chair Shop.	Farm.	General Sales.	Stone.	House Offal.	Totals.
1881.....	$322 56		$378 50		$2,529 01	$5,536 88	$8,766 95
1882.....	705 34		436 54		2,626 17	5,705 22	9,473 27
1883.....	1,174 96		476 22	$14 19	2,622 00	5,819 55	10,106 92
1884.....	1,480 93		316 76		4,238 77	6,449 96	12,486 42
1885.....	2,035 58		335 32	149 85	4,509 84	7,354 26	14,384 95
1886.....	613 93	$37 50	772 14	319 75	5,611 38	6,926 23	14,280 93
1887.....	514 64	634 19	1,595 10	241 37	4,684 14	6,856 59	14,526 03
1888.....	557 28	614 94	2,846 52	213 62	6,662 26	6,721 50	17,617 06
1889.....	274 84	479 28	3,684 59	144 36	5,564 18	7,324 61	17,471 86
1890.....	302 49	794 36	4,364 03	150 89	5,651 38	7,386 33	18,649 48
1891.....	1,201 33	844 62	5,213 68	161 71	6,107 86	7,716 77	21,245 97
1892.....	1,253 06	899 81	5,371 60	166 45	5,220 50	7,535 57	20,447 05
1893.....	703 70	325 86	6,400 64	210 09	5,826 74	7,033 52	20,500 55
1894.....	1,094 89	220 07	6,504 66	615 69	7,955 42	8,218 96	24,609 69
Totals.	$12,235 53	$4,850 63	$38,696 30	$2,387 97	$69,809 65	$96,586 05	$224,566 13

The experience of the past year has convinced us that the alterations made in the interior of the Almshouse have added greatly to the comfort of the aged, the insane, and the sick.

But the condition of the dependent and neglected children has not been improved by these changes. The legislation of the State provides for the removal of dependent children from the influence of almshouse life when they shall reach the age of four years.

But by a strange inconsistency those children whose neglected condition has called for the intervention of the courts may still be kept in close companionship with the demented, the diseased, the irascible, and in some cases, with the really vicious and degraded.

For many years the Almshouse and the workhouse formed a close union for the relief of the distress of poverty and the punishment of crime ; a union recognized by law to-day.

But it has been the practice of our judges in Cambridge to disregard the penal feature of the establishment and to allow it

to assume only the care and support of such persons as are unable, by the stress of poverty or broken health, to support themselves. This discrimination of the court has placed the Almshouse on a more respectable plane, and has added much to the comfort of the worthy poor.

The next important step for the city to take to improve the condition of her dependents is to declare, as the State has already done in part, that the Almshouse is an unfit place in which to properly educate and train children.

It will not be denied that the two most potent factors in the molding and shaping of human character are heredity and environment.

A community which fosters and cultivates the tendencies of a bad inheritance by a coarse and vicious environment, can only blame itself for the inevitable result of low and depraved social conditions, and the prevalence of crime; while on the other hand, that community which wisely strengthens and re-enforces all good inherited tendencies, and represses the evil by an uplifting environment, depletes the ranks of the criminal and pauper, and augments the sum of human happiness by tenderly conducting the feet of the young into the paths of pure, useful, and noble living.

Cambridge needs a well appointed and well managed children's home into which shall be gathered such children as by misfortune or neglect come under the care and protection of the Overseers of the Poor.

Leaving out of the account truant children (who are now well provided for by the establishment of a County Truant School) there have been received into the Almshouse in the last ten years, three hundred and seventy-five children who were fit subjects for such a home as is here advocated. It is, indeed, true, that many of them were temporary cases; but quite a number of them are now boarded in families at the expense of the city. The city pays about two thousand dollars a year for the support of such children.

This home, if established, wherever located, should be under the control and management of the Overseers of the Poor, who are recognized in law as the guardians of this class of unfortu-

nates. All intelligent students of social questions assure us that the surest way to increase the burdens of society for the support of the dependent and destructive classes is the neglect of friendless childhood. It is a wise economy which advocates the spending of a little money to evade the sure necessity of spending many times as much.

The products of the farm, notwithstanding the long drought in midsummer, have been quite abundant, and the sales are a little larger than last year, although the prices obtained have been lower than usual.

The stone quarried from the ledge has found a ready sale, and the amount derived from this source has been greater than in any former year. I beg to suggest the purchasing of several lots adjoining the city ledge if they can be obtained at a reasonable price, as the stone can probably be quarried by the city to better advantage than by private enterprise.

In these days of increasing municipal expenditures, incident to rapid growth in population, it is quite gratifying to be able to state that the net cost of the Almshouse, farm, and ledge has been less the past year by about seventeen hundred dollars than the average net cost for the nine years immediately preceding.

I bear cheerful testimony to the faithful and zealous performance of their duties by the officers and employees of the institution.

The counsel, support, and valuable assistance of your Board in the discharge of my duties is gratefully acknowledged.

Respectfully submitted,

MARTIN L. ELDRIDGE,

Superintendent.

REPORT OF THE ASSISTANT CITY PHYSICIAN.

OFFICE OF THE ASSISTANT CITY PHYSICIAN.
CAMBRIDGEPORT, December 1, 1894.

To the Board of Overseers of the Poor : —

GENTLEMEN : — I have the honor to present the following report of the doings of this office for the year ending Nov. 30, 1894.

ALMSHOUSE.

Number of visits to almshouse	220
Number of persons treated therein (men, 56; women, 36; boys, 8; girls, 10)	110
Number of professional visits to same	1,959
Number of births	2
Number of deaths	24
Cost of medicines and surgical appliances	$334 95

OUTSIDE AID.

Number of persons attended by direction of the Overseers of the Poor (men, 186; women, 286; boys, 110; girls, 130)	714
Number of professional visits to same	2,158
Number examined relative to their sanity	82
Number of certificates of insanity issued (men, 41; women, 24; dipsomaniacs, 10)	65
Number of births	14
Number sent to hospitals for treatment	25
Number vaccinated	4
Number of deaths	36
Cost of medicines and surgical appliances	$434 15

DEPARTMENTAL SERVICE AND TOTALS.

Number of persons visited at police stations	76
Number of visits to same	85
Number visited at request of Soldiers' Aid Committee	5
Number of civil service examinations for police force	22
Number of civil service examinations for fire department	28
Number of vaccinations by direction of school committee	210
Number of persons examined where suit was threatened	5
Total number of persons receiving professional attention	1,167
Total number of visits to same	4,469
Total number of deaths	60
Total number of certificates of death issued	79
Total amount expended for medicine and surgical appliances	$769 10

Gentlemen : — At the suggestion of the physicians of this city, the City Government has caused to be constructed an ambulance, for the free transportation within the city limits of such sick or disabled of our citizens as may require its use.

This ambulance has been constructed under the supervision of this office ; and for completeness in appointment, and ease and comfort in transporting qualities, is believed to be unequaled by any vehicle now used for a like purpose. It was built by the firm of Charles Waugh & Co., in this city, and every detail has been carried out with commendable painstaking.

The co-operation of your honorable body is solicited in the effort to make this ambulance of practical utility.

There is need of better facilities than now exist for the temporary treatment of the sick, the insane, and the injured. An emergency station in connection with the ambulance apartments should be provided, where all those now cared for in the police stations, except those under arrest, may receive necessary attention. The police stations are not hospitals, yet hospital work is frequently performed within them.

In our opinion medicine and surgery should be separated as far as possible from crime, and professional work in the police stations should be limited to the humane treatment of those for whose care and safe keeping the police are officially responsible.

The thanks of this office are due to Dr. Charles E. Vaughan, and are hereby tendered, for securing the means and the services of a nurse for the outside sick poor.

Much assistance in the care of the sick has been received from her, and many warm commendations for her from those receiving her attention, for her tender, womanly sympathy, and for her thoughtful and practical ministration to their necessities.

It is earnestly desired that the services of this nurse be continued.

Respectfully submitted,

LEWIS L. BRYANT,

Assistant City Physician.

CITY CLERK'S REPORT OF FEES AND LICENSES.

OFFICE OF CITY CLERK, December 18, 1894.

To the Honorable, the City Council: —

The undersigned herewith presents an account of the sums received for fees and licenses during the year ending Nov. 30, 1894: —

Auctioneers' Licenses	$42 00
Pool and Billiard Table Licenses	66 00
Wagons and Carriages	314 00
Intelligence Offices	22 00
Junk Licenses: Stores and Collectors	209 00
Pawnbrokers' Licenses	8 00
Recording Mortgages, Assignments, etc.	543 60
Marriage Certificates	423 50
Certified Copies from the Records	50 80
Dog Licenses	386 60
Liquor Licenses	49 00
Fireworks' Licenses	100 00
Sundries	87 65
Total	$2,302 15

All of which has been paid into the City Treasury.

The receipts from Dog Licenses have been $4,580. Of this amount, the Clerk's fee (20 cents for each license issued), amounting to $386.60, is included in the above list of fees; and the balance, amounting to $4,193.40, has been paid to the County Treasurer.

Respectfully submitted,

WALTER W. PIKE,
City Clerk.

REPORT OF CITY TREASURER'S FEES.

OFFICE OF CITY TREASURER, December 1, 1894.

To the Honorable, the City Council: —

The undersigned respectfully reports that the total amount of official fees received by him in the year ending Nov. 30, 1894, is $1,677.54. This amount has all been turned into the City Treasury as fast as received, and will be found in the report of the City Auditor on the credit side of the Treasury Department account. The details are as follows, viz.: —

Received for summonses issued	$902 75
Making descriptions for advertising	236 75
Cost of advertisements	193 79
Posting notices of sale	154 25
Making collector's deeds	95 00
Making affidavits of demand sale and posting	95 00
	$1,677 54

Respectfully,

WM. W. DALLINGER,

City Treasurer.

REPORT OF THE CITY MESSENGER.

OFFICE OF CITY MESSENGER, CAMBRIDGE, December 26, 1894.

To the Honorable, the City Council: —

GENTLEMEN: In compliance with the Ordinance relating to the purchase and delivery of Stationery, the City Messenger has the honor to submit his annual report.

Stock of Stationery on hand Dec. 1, 1893	$274 68
Purchased during the year	877 84
	$1,152 52

Delivered to heads of departments as follows: —

Street Department	$71 54
City Clerk's Department	60 17
Engineering Department	48 21
Clerk of Committees Department	78 88
Auditor's Department	58 38
City Messenger's Department	144 59
City Treasurer's Department	45 37
Police Department	68 55
Lamp Department	3 85
Assessors' Department	95 18
Fire Department	4 80
Inspector of Milk Department	7 50
Superintendent of Public Buildings Department	14 27
State Aid Agent	11 73
Inspector of Wires	25 35
Law Department	15 40
Executive Department	48 97
Election Expenses	62 94
Sealer of Weights and Measures	2 40
Registrars of Voters	8 21
Park Department	28 89
Stock of Stationery on hand Dec. 1, 1894	247 34
	$1,152 52

Respectfully submitted,

FRANCIS L. PRATT,

City Messenger.

REPORT OF THE TRUSTEES OF THE PUBLIC LIBRARY.

The last year in the history of the Cambridge Public Library will be forever associated with the sudden death of our highly valued and beloved librarian, Miss Almira L. Hayward. On the morning of the 11th of October, while busy in the rearrangement of the books in the reference library, a work consequent on the enlargement of the building, she stepped inadvertently through the opening of the ventilator, which had been left for a short time uncovered, in order that the iron-work might be cleaned. Miss Hayward was well aware that it was open, but apparently forgot it in the absorption of her task. Falling upon the asphalt pavement of the basement, she must have struck upon the back of her head, and she never recovered consciousness. Two physicians were immediately sent for, and reported the skull fractured, a judgment confirmed by the medical examiner, Dr. Swan, who arrived not long after. Two of the Trustees also came almost immediately, and they, with the assistant librarians, took all the care and supervision that was possible under the circumstances. On investigation, it did not appear that any one was to blame for the accident, as the ventilator had been opened by Miss Hayward's direction, and would have been sooner closed had not she, in her eagerness to finish her work, found constantly other employment for the janitor, who was about to close it. When she fell it was with a volume of the Atlantic Monthly under her arm, and the book lay beside her at her death. The following minute was entered by the Trustees on their records, to express their respect and gratitude for their late librarian: —

"The Trustees of the Cambridge Public Library desire to place on record their sense of the great loss sustained by the library and the city in the sudden death of Miss A. L. Hay-

ward, the librarian in chief. She was in many respects a remarkable woman. Her conscientious self-devotion was without limit, and long experience had developed in her some of the very highest qualities of a librarian: knowledge of books, industry, organizing power, and a ready sympathy with all students. More remarkable than these traits, perhaps, was the promptness with which she adapted herself to the great enlargement of the library, and that transformation of its methods which accompanied its removal to a new building. Instead of being at the head of a small and practically local library, she found herself placed in charge of a large central institution, extending its local deliveries into all parts of the city, and opening constantly new paths of usefulness. Some of these new methods did not at first approve themselves to her judgment, yet she showed the rare quality of adopting, when necessary, the plans of others as if they were her own, so that no one would have suspected that they were not. In other cases she held firmly to her own views, and finally brought the Trustees round to her opinion. The plan of an addition to the building, with special reference to the needs of the children, was largely hers; she was spared to see its completion, and met her death while placing the new rooms in order. She died literally in harness, as she always wished to die; and her name will be forever associated with the most important formative period of her beloved institution."

The news of Miss Hayward's death spread rapidly through the city; and it was generally recognized that no woman in Cambridge would have been so much missed or so widely mourned. At her funeral, in the Shepard Memorial Church, on the following Sunday, her pall-bearers were among the leading officials of the city: the Mayor, the Superintendent of Schools, two of the Library Trustees, the President of the Young Men's Christian Association, and other well-known citizens; and this was only the outward recognition of a great loss and a widely spread grief.

After Miss Hayward's death the care of the library devolved upon Miss Etta L. Russell, who proved herself, as might have been expected, altogether competent for it. She assumed the

duty at a peculiarly hard time, as the new children's room was just ready for occupation, and the initiation of this change, together with the preparation of the Annual Report and Statistics, devolved entirely upon her. So well did she manage it that the new arrangement has worked from the beginning without the slightest friction, — the children taking possession of their room as if it had always been theirs, entering at their own door, and at once increasing very greatly the convenience and comfort of older visitors, who were, before this, in danger of being crowded out, and whose number is increased since the change. The new room accommodates fifty readers, and is always full in the latter part of the afternoon and on Saturday morning. The plan was originally suggested by a similar room at the Brookline Public Library; but ours is better arranged, as it forms a part of the same suite with the reference library and offices.

One of the most important among the statistical items of the Librarian's Report is the fact that the number of volumes called for in the reference library, and brought from the stack-room for use, has been no less than 5,768 during the year, or more properly during nine months, as the reference library was closed from July 28 to October 21. This makes an average of more than twenty a day, winter and summer; and when we consider that these books were mainly asked for by adults, and that the number does not include the 2,000 books in the reference library itself, the fact is most encouraging as to the serious and constant use now made of the library by mature persons. It is to be regretted that the structure of the building does not permit us to go very much farther in the direction of freer access to the shelves, — which is the modern tendency in libraries, — the space for readers in the stackroom itself being so very limited. It has been suggested that the main works on American history — the department most consulted — should be brought together in the room not yet appropriated, over the children's room, and that all students of that department should have free access there. This will be virtually an enlargement of the reference library, implying few, if any, additional restrictions.

The school and local deliveries have continued their successful career, the North Cambridge delivery being especially notable for the large number of books drawn, this being largely due to the activity and interest of our agent in that locality, Mr. Hunnewell. The number of books issued to the schools varies largely according to the school, the Allston and Wellington leading conspicuously. During the past year pains have been taken to distribute more widely the lists of new books; and it is hoped that we may be able, at some future time, to issue a small monthly bulletin containing some explanatory notices in regard to the more important books.

The Trustees have elected as librarian Mr. W. L. R. Gifford, of the New Bedford Public Library. It may be proper to mention that Miss Russell declined to be a candidate for promotion to the vacancy. Mr. Gifford has formerly resided in Cambridge, having been a Harvard graduate of 1884. He is thoroughly versed in the management of a public library larger than ours, and brings with him the highest of recommendations, the expressed unwillingness of his former employers to part with him. It was originally intended that he should begin his duties on the first of January; but in deference to the wish of the New Bedford Trustees, three of whom came to Cambridge for the purpose, it has been decided to delay his transfer until a month or more later. The strong desire of these Trustees to retain his services affords the best proof of his value.

One of the most interesting gifts received by the Library during the year past has been that of a manuscript by our late distinguished townsman, the Hon. James Russell Lowell, presented by his daughter, Mrs. Burnett. At about the same time, the Trustees purchased another manuscript by another eminent Cambridge resident, the Hon. Edward Everett, — this being the address prepared by him in addressing the Massachusetts Horticultural Society, during the brief interval between his returning, in 1845, from five years of diplomatic service in Europe, and his assuming the presidency of Harvard University. Such documents carry us nearer to their authors than anything else now can: they show their handwriting, their

corrections, and their modes of literary preparation, and it is highly desirable that we should gather as many of them as possible for the Cambridge Room.

Respectfully submitted,

THOMAS WENTWORTH HIGGINSON,

For the Trustees.

REPORT OF THE LIBRARIAN.

To the Trustees of the Cambridge Public Library :—

GENTLEMEN: — The report of the Library for the year ending November, 1894, is herewith submitted. The past year has been largely one of preparation, and the foundations have been laid, we trust, for a larger work in the future. The hope of previous years has become a reality, and it is gratifying to record the completion of the new wing, which provides an attractive reading-room for children, with an adjoining catalogue room and librarian's office. On the second floor, besides the trustees room, there is a large, well-lighted room which will serve for the historical department of the reference library, and for students desiring a quieter place for study.

In order that the new part might be connected with the old, it was necessary to close the library from July 28 to September 4. The reading-room it was not possible to open until October 21. During the period of closing, a thorough examination of the reference library and stackroom was made, the report of which has been submitted to the Committee on Care and Circulation of Books. Sixteen of the books missing at that time have since been accounted for in various ways, and the amended report accompanies this.

The usefulness of the library is beyond question, and its prosperity is manifest in all the departments.

In the purchase of books special consideration is given to the needs of the schools, as well as to the more general needs of the public, and the most popular books are duplicated, that the Locals may be well supplied.

The alterations in the delivery-room have given better accommodation to the public as well as to the desk attendants. On the re-opening of the library the registration was transferred to the delivery desk, and a new system adopted, which is simpler and more reliable. This combination is a marked advantage, although it adds materially to the work of the

attendant. The Sunday attendance, both of adults and children, has been good.

No more precious legacy could have been left by our beloved librarian than this library, equipped as it is for broad and useful work. To those daily associated with her, the memory of her faithful, conscientious spirit, and her readiness in serving others, will ever be an incentive and inspiration. By her thoughtful consideration, her unvarying kindness and sympathy, her rare justice, she endeared herself to all, and won the deepest love and respect. She gave much thought and attention to the training and education of the young, and the Children's Reading-Room, just completed, was largely her own plan. The room presents possibly our greatest field for work, and no pains have been spared to make it pleasant and attractive. Books, both instructive and entertaining, have been placed on the shelves, and it is hoped the little ones may be guided into an intelligent use of them. November 17, the room was opened to the expectant children, and if numbers may be considered an indication of success, in this instance the expectations of all have been realized.

In spite of our prosperity there is still much to be desired. The most serious problem confronting us is the question of reshelving and re-numbering our books under an improved classification. When we came to this building in 1889, the change would then have been made, but for the fact that we had just issued, at considerable expense, a printed catalogue. What was then deemed an advantage has since been regarded as a hindrance, so far as improved shelving is concerned. As the printed catalogue has given us some years of good service, we may be justified in abandoning it. The need of a complete card-catalogue has long been recognized, and for a few months the necessary revision, preparatory to typewriting the cards, was carried on. For lack of funds the work was suspended.

Attention is also called to the desirability of having the pamphlets classified, the public documents rearranged and made accessible, and lists of our duplicate books prepared. The printed cards of the Library Bureau have been in use one year for newly published books, and have given much satisfaction.

It is hoped that our subscription for these cards may be continued.

Library Bureau cards received up to Nov. 25, 1894	4,798
Library Bureau cards used up to Nov. 25, 1894	1,976
Cards typewritten up to Nov. 25, 1894	1,831

In noting the statistics, the closing of the library should be taken into consideration. While the sum total of the circulation is smaller, the average per day is larger than that of the year previous.

Circulation.

	Central.	Local.	Schools.	Total.
First Quarter	29,941	5,967	1,879	37,787
Second Quarter	30,782	5,826	1,777	38,385
Third Quarter	14,289	2,928		17,217
Fourth Quarter	21,356	3,558	1,328	26,242
Total	96,368	18,279	4,984	119,631

Average per day (Central)	356
Average per day (Local and schools)	114

The largest issue for any day from the local delivery (February 3) was 281; the largest issue for any day from the school delivery (January 18) was 196; the largest issue for any day from central library (February 17) was 797.

Number of books drawn from the stack for reference in the reading-room, 5,768.

Teachers' books drawn directly from library, 693.

Classified Circulation.

	Fiction.	Juvenile Literature.	Biography.	Miscellany.	History.	Poetry.	Science and Art.	Travels.	Bound Magazines.	Current Magazines.	Foreign Literature.	Total for year.
Central Library	42,417	21,418	4,287	7,420	4,584	2,100	6,365	3,296	678	2,302	1,501	96,368
Local and Schools.	11,538	5,966	898	531	1,103	203	995	1,674	62	186	107	23,263
Total	53,955	27,384	5,185	7,951	5,687	2,303	7,360	4,970	740	2,488	1,608	119,631
Per cent.	.45	.22	.04	.07	.06	.01	.07	.04	.006	.02	.014	

School Delivery.

Name of School.	Allston.	Corlett.	Harvard.	Morse.	Peabody.	Putnam.	Shepard.	Thorndike.	Washington.	Webster.	Wellington.	Latin High.	Total.
Books Delivered.....	925	61	250	470	646	202	595	286	663	406	821	...	5,325

Local Delivery.

Stations.	Belmont.	North. Cambridge.	East Cambridge.	Cambridgeport.	Lower Port.	Ward Four.	Total.
Books	1,622	5,599	2,884	3,079	2,239	2,515	17,938

Additions.

Source.	City Appropriation.	Citizens' Subscription Fund.	Income of Cummings Fund.	Income of Fay Fund.	By Exchange.	Bound Periodicals.	Given.	Total.
Books.....	2,187	66	2	2	55	15	397	2,724

A list of the donors accompanies this report as Appendix A.

Estimated number of volumes in the general library	42,818
Estimated number of volumes in the Wyman Medical Library .	3,952
Total	46,770

Number of books replaced	1,093
Number of books bound or repaired	3,475
Number of books labelled or covered	13,726
Number of postals sent for books overdue	4,985
Present number of card holders (September 4 to date)	7,073

The following amounts have been received for fines and catalogues. The City Treasurer's receipts for these sums have accompanied the quarterly reports.

	Fines.	Catalogues.	Total.
First quarter	$116 40	....	$116 40
Second quarter	113 13	....	113 13
Third quarter	85 32	....	85 32
Fourth quarter	66 07	$2 25	68 32
	$380 92	$2 25	$383 17

All of which is respectfully submitted.

ETTA L. RUSSELL,
Acting Librarian.

APPENDIX A.

LIST OF DONORS OF BOUND VOLUMES.

Mrs. Sumner Albee. 9 unbound and	19
American Humanitarian League	1
F. Apthorp. 3 duplicates and	13
Arena Company	1
Argentine Republic	1
Arnold Publishing Association	2
Albert M. Barnes	1
J. W. Bartlett	1
D. N. Beach	2
Bogert & Durbin Co.	1
Charles K. Bolton	1
Boston, City of	1
Bureau of American Republics	8
Cambridge, City of	1
Miss C. F. Carey	1
Miss S. C. Clark	2
Rev. Wm. Cobb	1
Dr. E. R. Cogswell	2
F. K. Collins	1
Prof. J. P. Cooke	3
Miss Mary E. Cotton. 5 duplicates and	3
A. McF. Davis	2
Mrs. George H. Folger	9
F. A. Foster. 5 duplicates and	10
Friendship Lodge	1
Prof. W. W. Goodwin. 22 pamphlets for the Cambridge room, and	98
Prof. Gurney's heirs	4
Warren Hapgood	1
Col. T. W. Higginson	51
F. S. Hill	2
Library Hall Association	1
Miss Alice Longfellow. 2 duplicates, and	27
Prof. Eben J. Loomis (Cambridge room)	1
Mrs. Henry S. McKean. 2 duplicates, and	3
Alexander McKenzie, D. D.	1
Massachusetts, Commonwealth of	37
P. B. Mead	1
Prof. Charles E. Munroe	3
New England Conference of Educational Workers	1

John Peterson	12
William T. Piper	1
George B. Reed	1
Prof. W. J. Rolfe	7
W. A. Stearns	2
Mabel Loomis Todd (Cambridge room)	1
S. E. Turner	2
United States	34
University of Pennsylvania	1
Unknown	5
Mrs. Austin C. Wellington	1
Prentiss Wheeler	1
Mary Woodman	1
J. C. Wyman	1
Dr. Morrill Wyman	8
	397

REPORT OF THE SUPERINTENDENT OF PUBLIC BUILDINGS.

OFFICE OF THE SUPERINTENDENT OF PUBLIC BUILDINGS,
CITY HALL, December 1, 1894.

To the Honorable, the City Council of the City of Cambridge: —

GENTLEMEN: — In accordance with the requirements of Section 4, Chapter 13, of the City Ordinances, I have the honor to present the ninth annual report of this department.

Every year since this office has been established has brought to it new features, new ideas, and new and more modern methods of procedure; in brief, this department stands to-day as one of the most important connected with our City; and to carry out all its details and render satisfactory service to the City requires a large amount of time, thought, and study; and while striving to insure the City good and substantial work on contracts awarded, one invariably meets with obstacles, which at a glance seem but a speck, but eventually grow in magnitude and assume conditions which at times are trying and irksome.

It is believed to be the duty of every citizen to aid the heads of the several departments, and point out to them at once, such defects as they may discover and not wait until the work is far advanced, when extra expenses are liable to be entailed, which at an earlier date might have been prevented.

During the past year a large amount of work has been done on the City buildings and school houses in the line of repairs and sundry improvements, making them more comfortable for the occupants and more comely in their general appearance. Several new buildings have been erected, and there are in the course of construction, a new school house in Ward Five, and a new engine house in Ward Two.

It has been necessary, in order to accommodate the pupils in Wards Three and Five, to occupy other buildings, as the

school houses were overflowing. In Wards Three and Five ward rooms have been utilized, and in Ward Five rooms were hired from different parties.

Sanitary Arrangements.

The sanitary arrangements in the following schools have been cared for, and at present are in a good and healthful condition; viz., Cushing, Old Gannett, Lowell, and Lassell, the total cost being $4,292.55. The sanitary condition of the Agassiz School was such that immediate attention to it was demanded. Almost at the close of the financial year of 1893, and by a special appropriation made by the City Council, the work was pushed at once, and the scholars in a short time were enabled to return to the school. There still remains a necessity for improvement in the sanitary condition of the Harvard, Washington, and Willard schools. The Board of Health has entered several complaints relating to the same, and an entirely new construction of sanitary arrangement is respectfully suggested. The subject being of far-reaching importance, it will be necessary to consider the whole subject carefully, from the standpoint of a proper system of heating, ventilation, and new sanitary appliances, suiting the condition of each of the school buildings mentioned; and the matter is respectfully submitted for your early consideration and the necessary appropriation.

Parker School.

The final payment for the erection of this building was made in December, 1893, and the building was accepted and occupied in January, 1894. In the months of July and August, two additional rooms were finished and furnished, for which an additional appropriation was made; the whole expense of this building, including furniture, was $18,800.

New School House in Ward Five.

An advertisement was inserted in the Cambridge Press, August 4, and proposals were received for the erection of a

brick school house on the corner of Cedar and Dudley Streets. The contract was awarded to W. I. Mabie, for the sum of $19,975.

The appropriation was	$29,256 80
Expended	8,303 46
To be re-appropriated	$20,953 34

Head Janitor for School Houses.

One of the most important matters connected with our school buildings is the proper care of the property committed to janitors. A marked contrast was observed by the Committee on Public Property, when visiting the cities of Providence and Fall River, in the general care and neatness of the school structures as compared with those of our City. It was observed that the janitors were proud and anxious to show the condition of their buildings, and had a general understanding of all details of heating, ventilation, and preservation. The school houses of our own City are suffering for want of proper care, and some janitors show a careless indifference and a lack of responsibility in doing the work which the City employs them to perform. It is suggested that a thoroughly competent man be appointed to have a general oversight of the school buildings, whose duty shall be to see that janitors perform the duty assigned them, to notice any laxity or omission of the same, and report to the School Board for their action.

2. It should be his place to look into the necessity of all work or improvements required, as also all supplies, and report to the Superintendent of Public Buildings.

3. He should be generally informed and interested in the application of ventilation and heating of the building in the most practical and economical manner, and work in harmony with the School Board and the Superintendent of Public Buildings to bring about the best results.

4. He should make himself generally useful in doing small repairs, and be accountable to the School Board for the faithful performance of his numerous duties.

With the appointment of a man thoroughly qualified to fill the position as suggested, an immediate and general improvement

must be the result, and prove a source of great value in applying much needed care to our City property. The matter is respectfully brought to your serious consideration for action.

Fire Department.

Front Street Engine and Truck House, Nos. 2 and 3.

This building was completed and accepted Jan. 2, 1894, and occupied by the Fire Department February 6, and is considered one of the finest engine houses owned by the City. All the conveniences necessary are attached to the house, and its surroundings are pleasant and imposing. The total cost of the structure was as follows : —

Appropriation	$27,500 00
Expended in 1893	15,863 31
	$11,636 69
Expended in 1894	11,632 91
Balance	$3 78

New Engine House in Ward Four.

During the month of June an advertisement was inserted in the Cambridge Press, calling for bids for the erection of a brick engine house, on the City land on the corner of Main and Deacon Streets. Several proposals were received, and the contract was awarded to John H. Laskey, for the sum of $16,700, without the heating and ventilation.

The appropriation was	$19,000 00
Expended	6,987 76
To be re-appropriated	$12,012 24

While a great deal has been said relative to the erection of this building, and while the work has not progressed as rapidly as could have been wished (owing to financial difficulties on the part of the contractor), still it is now well under way, and will undoubtedly be completed in time for occupancy early in the year of 1895.

Engine House in Ward Three.

Plans for a new engine house in Ward Three are now being drawn by John E. Muldoon, architect, and will be submitted during the month of December. The building is to be erected

on a lot of land on the corner of Gore and Third Streets, which was deeded to the City by the County Commissioners, in place of the land recently taken by them for county purposes.

Land for Engine House 4 in Ward 5.

A lot of land has been purchased during the year on the corner of Massachusetts Avenue and Blake Street, the purpose being to erect upon the same, during the coming year, an enlarged and more suitable engine house, to take the place of the one now occupied by Steamer No. 4. The matter of its erection will be brought more fully to your attention in due time.

City Hall.

The care bestowed on our new City Hall touches the pride of all our citizens. The Janitor and his assistants do their duty in a manner worthy of the highest commendation ; and the Engineer has cared for the steam plant with a faithfulness worthy of mention. No public building can show better results, and it is a source of pleasure to speak of duties so well performed.

Electric Lighting of the City Hall.

The great increase in the cost of lighting the City Hall building during the past six months (by electric service) has led to some correspondence with that company, but with no satisfactory results. After consulting the Superintendent of Wires and Lamps, by letter and otherwise, the following communication has been filed in the department : —

OFFICE OF SUPERINTENDENT OF LAMPS AND INSPECTOR OF WIRES,
CAMBRIDGE, Dec. 5, 1894.

MR. BENJAMIN H. STEELE, SUPT. OF PUBLIC BUILDINGS, —

Sir : Your letter of December 4, in which you ask for suggestions in relation to reducing the cost of lighting City Hall, at hand. The expense under the present agreement with the Electric Light Co. will, as you say, average over $100 per month. The Engineer of City Hall informs me that we have steam capacity for a lighting plant; therefore the only expense would be for an engine and dynamo, with the necessary connecting wires and switches. The whole expense would not exceed $1,800. Labor would not enter into the cost of operating, as no additional help would be necessary. With such a plant the expense would not exceed $33 per month, including interest, depre-

ciation, and coal account. Should the City take the electric light plant next year, the City Hall plant would not be a loss, as even then it would be desirable to run the isolated plant.

In view of the above facts, I have no hesitation in recommending the immediate installation of the necessary apparatus.

Respectfully yours,

C. H. MORSE,
Superintendent of Lamps.

The matter as stated is respectfully submitted for your consideration and action.

Old City Hall.

This building, which has been unoccupied since the new City Hall was completed, has been offered for sale for some time, and has finally passed into the hands of the Prospect Union, for the sum of $25,762.

Inspection of Boilers.

Owing to the necessity of having the boilers in the various buildings inspected, it was deemed advisable to have some one appointed to do the same, and also to superintend all such work when found necessary to be done. Mr. E. B. Dale, Engineer at the City Hall building, being a competent person, was assigned the duty, at a compensation of $200 per year.

Smallpox Hospital.

The City Engineer has prepared plans for the erection of a building to be used as a smallpox hospital; but the Committees on Health and Public Property have not been able to obtain a proper location for the same, although various locations have been inspected. Owing to the nature of the building, a great deal of care is required in order to conform to the law.

Shooting Range.

Several complaints having been made as to the safety of the inhabitants in the vicinity of the Shooting Range, it was, by order of the City Council, discontinued, and steps are being taken to obtain a more suitable location.

Election Expenses.

It was found necessary, in order to accommodate the voters in Ward One, to erect a Voting Booth, which was done at the expense of $300. The booth is made in sections, and can be moved to any point required, or stored away when not in use. Various halls have been hired (when the occasion required) for use of the voters; as the City increases, steps will have to be taken in order to meet the growing demands.

Inspection of Plumbing.

This branch of this department is under charge of Mr. Wm. A. Ford, who was appointed by me in accordance with the provisions of the ordinances relative thereto. It has become an important factor to our City, as those engaged in that work have been obliged to comply with the ordinances of the City, as well as late enactments of the Legislature; therefore the work has been more satisfactorily performed than in previous years. Possibly some may have felt it a hardship; but realizing that a compliance with the law was obligatory, everything at present is progressing harmoniously. The following are the statistics of the work of this department for the year ending November 30, viz.: —

Number of permits issued	1,074
*Number of recorded inspections	2,114
Number of prosecutions for violations of ordinance	1
Number of jobs, defective or otherwise, not in accordance with the ordinance	20
Number of journeymen plumbers registered under Acts of 1894	86
Number of employers	37

* This does not include visits made to work during progress of the same subsequent to first and previous to final inspection.

Real Estate Belonging to the City.

SCHOOLS.

Buildings.	Location.	Feet of Land.	Valuation.
Washington	Brattle Street	14,951	$32,000 00
English High	Broadway	74,366	238,000 00
Corlett	Holworthy Street	10,000	4,000 00
Agassiz	Sacramento Street	19,689	24,000 00
Cushing	Cushing Street	14,787	4,000 00
Dunster	Concord Avenue	10,000	6,000 00
Holmes	Hilliard Street	11,182	10,500 00
Lowell	Lowell Street	12,033	9,500 00
Quincy	Mason Street	8,469	15,000 00
Riverside	Putnam Avenue	11,192	8,000 00
Latin	Fayette Street	37,828	55,900 00
Latin	Lee Street	10,100	15,000 00
Wellington / Gannett	Columbia Street	27,673	50,300 00
Allston	Boardman Street	15,193	34,600 00
Harvard	Inman Street	20,494	57,000 00
Bridge	Pioneer Street	4,646	1,900 00
Parker	Broadway		22,000 00
Dana	Centre Street	14,317	6,300 00
Felton	Amory Street	15,090	10,500 00
Gannett (new)	Jefferson Street	15,434	15,000 00
Sargent	Broadway	9,995	7,000 00
Stearns	Harvard Street	10,050	8,000 00
Putnam	Fourth Street	11,900	68,300 00
Thorndike	Thorndike Street	10,027	34,000 00
Gore	Gore Street	9,900	29,600 00
Lassell	Charles Street	10,000	10,500 00
Otis	Otis Street	8,270	16,000 00
Webster	Upton Street	25,839	59,000 00
Boardman	Windsor Street	10,018	16,000 00
Tarbell	Griggs Street	19,500	12,000 00
Willard	Niagara Street	20,079	30,000 00
Morse	Brookline Street	25,650	80,000 00
Peabody	Linnæan Street	21,813	34,000 00
Shepard	Massachusetts Ave.	14,755	37,000 00
Reed	Reed Street	12,000	5,200 00
Wyman	Spruce Street	14,347	9,000 00

CITY BUILDINGS.

Ward One	Brattle Square	16,153	$69,700 00
Ward Four	Central Square	13,028	60,500 00
City Hall	Massachusetts Ave.	48,474	248,500 00
Hook and Ladder House	Portland Street	11,931	15,000 00
Engine House No. 2	Massachusetts Ave.	10,000	33,473 00
Engine House No. 4	Massachusetts Ave.	6,516	10,000 00
Engine House No. 5	Inman Square	6,000	13,000 00
Engine House No. 6	River Street	4,924	14,500 00
Engine House	Lexington Avenue	15,262	16,000 00
Engine House No. 3	Third Street	5,250	24,000 00
Police Station	Fourth Street	4,220	22,100 00

Maintenance of School Houses.

Schools.	Fuel.	Repairs.	Supplies.	Ex. Labor.	Janitors.	Totals.
Allston	$295 40	$313 87	$163 05	$1 00	$378 19	$1,151 51
Agassiz	229 85	376 64	30 48		626 00	1,262 97
Boardman	211 00	335 16	33 65		521 65	1,101 46
Corlett	59 30	5 33	2 00	8 00	234 75	309 38
Cushing	90 20	6 00	3 10	8 00	234 75	342 05
Dana	63 30	279 45	1 03		269 46	613 24
Dunster	105 50	51 38	15 70	9 00	495 58	677 16
Felton	147 70	100 77	27 23		269 48	545 18
Gannett (new)	168 80	158 64	92 54		461 50	881 48
Gannett (old)		32 15	1 43		495 57	529 15
Gore	253 20	259 62	136 92		730 32	1,380 06
Harvard	649 25	719 90	178 16		852 90	2,400 21
High	1,723 65	706 18	621 95		1,800 00	5,885 36
Holmes	84 40	98 94	39		352 15	535 88
Lassell	131 90	123 82	47 77		334 84	659 33
Latin	362 75	610 30	127 22		852 90	1,998 17
Lowell	129 73	136 36	65		313 00	579 74
Morse	744 25	147 17	29 89	2 04	1,043 32	1,966 67
Otis	148 70	70 61	51 27		626 00	896 58
Parker	327 12	373 13	89 31	46 74	423 30	1,259 60
Peabody	385 55	412 66	101 10		730 32	1,629 63
Putnam	799 39	189 82	182 05	3 26	1,043 32	2,217 84
Quincy	130 23	99 28	17 14		313 00	559 65
Reed	109 26	16 15	1 30		365 14	491 85
Riverside	158 83	501 08	15 60		339 07	1,014 58
Sargent	136 00	149 47	7 27		378 20	670 94
Shepard	253 20	125 67	48 56	120 00	626 00	1,173 43
Stearns	126 60	375 12	9 75	1 50	269 63	782 60
Tarbell	156 07	112 84			339 08	607 99
Thorndike	316 50	101 25		296 20	730 32	1,444 36
Washington	263 85	161 00	269 94	17 75	586 85	1,299 39
Webster	590 80	905 73	342 13	5 00	939 00	2,782 66
Wellington	717 40	613 64	40 96	5 00	495 57	1,872 57
Willard	293 32	248 39	38 82		730 32	1,310 75
Wyman	122 50	59 00	1 36		417 32	600 18
Walden St	8 58	15 59	11 40	30 00	149 35	214 92
All Schools	344 03	126 76	815 41	1,201 55		2,487 75
Totals	$10,838 01	$9,118 87	$3,556 53	$2,854 71	$19,768 15	$46,136 27

Care and Repair of City Buildings.

CITY HALL.

For fuel	$1,644 86
Gas and electric lighting	766 61
Furnishing and supplies	2,108 40
General repairs	1,507 54
Janitor	1,200 00
Engineer	1,172 15
Fireman	626 00
Watchman	730 00
Extra labor, etc.	2,467 17
Total	$12,222 73

WARD ONE, BRATTLE SQUARE.

For fuel	$932 45
Gas	434 72
Janitor	1,400 00
General repairs	544 83
Miscellaneous furnishings	235 61
Lighting tower clock	120 00
Total	$3,667 61

WARD FOUR BUILDING, CENTRAL SQUARE.

For fuel	$386 30
Gas	259 87
Janitor	1,400 00
General repairs	551 08
Miscellaneous furnishings	111 20
Total	$2,708 45

POLICE DEPARTMENT.

Police Station 1, Brattle Square	$26 44
Police Station 2, Central Square	37 36
Police Station 3, Fourth Street	1,264 34
Police Station 5, Massachusetts Avenue	33 75
Total	$1,361 87

FIRE DEPARTMENT.

Engine House No. 1, Brattle Square	$86 82
Engine House No. 2, Massachusetts Avenue	620 50
Engine House No. 3, corner Otis and Third Streets	102 62
Engine House No. 4, Massachusetts Avenue	123 09
Engine House No. 5, Inman Square	143 66
Amount carried forward	$1,076 69

Amount brought forward	$1,076 69
Engine House No. 6, River Street	231 96
Chemical House No. 1, Central Square	302 63
Hook & Ladder No. 1, Brattle Square	26 95
Hook & Ladder No. 2, Portland Street	145 34
Total	$1,783 57
Miscellaneous	905 00

ELECTION EXPENSES.

Appropriation	$900 00
Additional	306 92
	$1,206 92
Expended	1,206 92

Remarks.

The amounts required for the present financial year are not given in this report, as it is deemed inexpedient for one retiring from office to make estimates for his successor. Some points which must be considered in relation to the appropriation for this department have been touched upon, as follows: —

The balance of contracts will have to be re-appropriated in order to complete the work. The services of janitors must be met, — the estimate for fuel, gas, and electric lighting can be easily reached, — and the buildings must be cared for and repaired. The heating system calls for no small amount of expense, and emergencies are liable to arise; therefore, in making the estimates a little leeway must necessarily be allowed. The pride that the citizens take in our public buildings should not be lost sight of when the budget is made up; and the fact must be borne in mind that, to keep these buildings as they should be, requires a liberal expenditure.

It is with pleasure one can look back at the end of the financial year and point to work accomplished, and find that the limit of the appropriation has not been overstepped; but the same feeling does not exist when work that should have been done has been neglected on account of the lack of sufficient funds; and instead of receiving commendations, censure is given to the head of the department. With the best interests of the city in view, it has been the aim of this department to

keep within bounds, and yet meet the many demands made; not to court extravagance or to be too economical.

To his Honor the Mayor, the members of the Committee on Public Property, and the several heads of departments, I extend my sincere thanks for the courtesy shown and kindly aid given me in the performance of my duties; and feel assured that the same disposition will always be manifested towards him who in the future shall occupy this position.

Respectfully submitted,

BENJ. H. STEELE,
Superintendent of Public Buildings.

REPORT OF THE INSPECTOR OF BUILDINGS.

OFFICE OF THE INSPECTOR OF BUILDINGS,
CITY HALL, CAMBRIDGE, December 1, 1894.

To the Honorable the City Council of Cambridge: —

GENTLEMEN: — I have the honor to submit my ninth annual report relating to the business of this department for the year ending November 30, 1894.

By reference to the annexed tables it will be seen that 600 permits have been issued during the year for building alterations, etc., and that 272 examinations have been made in cases of dangerous conditions, violations of the building ordinances, etc.

Builders have promptly applied and secured permits, and a general compliance has been accorded to the requirements of the building ordinances of the city.

Following is a table showing the number and character of alterations ordered where the services of the Inspector of Buildings have been required in the interest of public safety: —

Buildings in dangerous condition	45
Dangerous flues	22
Wood too near flues	19
Weak foundations	52
Fire checks ordered	59
Violation of the building ordinances	38
Notices to State Inspector	12
Inspection of buildings to move	20
Funnel outside of house	5
Total	272

The following table shows the number of permits granted in each ward for buildings, etc., and the use for which they were intended: —

BUILDINGS.	WARDS.				
	1	2	3	4	5
Addition to houses	31	26	7	29	19
Bakeries				1	
Bank			1		
Boat house	1				
Carriage houses	3	1		1	
Cellar walls	8	10	6	7	6
Chimneys	1		1		
Churches		1		1	
Coal shed		1			
Dwelling houses in blocks		8		4	
Dynamo		1			
Electric works				1	
Engine house				1	
Factories	2	3	1	2	2
Foundry		1			
Grand stand	1				
Green houses	1	1			
Hospital	1				
Museum	1				
Offices	2	2			1
Sanitaries	1				
School houses	3				1
Shops	1	2		7	2
Single dwelling houses	58	81	8	45	104
Smoke house				1	
Stables	5	9	4	11	9
Steam boilers	2	1	1		
Storage	3	12	9	9	4
Stores				4	3
Studio	1				
Tank house		1			
Total	126	161	38	124	151

Of the foregoing permits 534 were issued for wooden buildings, 22 for brick and stone buildings, and 44 for sundry purposes. Making a total of 600.

Those of brick or stone are as follows: —

Boiler houses	2
Church	1
Dwellings	4
Electric works	1
Engine house	1
Factories	5
Museum	1
Office	1
Public Library	1
School house	1
Stable	1
Storage	3
Total	22

Number of permits granted for each month during the years 1893, 1894: —

	1893	1894
December	38	20
January	13	20
February	14	28
March	38	58
April	71	60
May	58	60
June	73	52
July	48	49
August	35	75
September	35	49
October	56	69
November	48	60
Totals	527	600

In presenting this, my final report, after nine years of service for the city as Superintendent of Public Buildings and Inspector of Buildings, it is exceedingly satisfactory to present a showing so favorable for our city in the work of this department. The number of permits issued during the year ending Nov. 30, 1894, were, as shown by the foregoing tables, 600, exceeding the number of any previous year. Since the establishment of this department, 4,929 permits have been issued, making an average of about 547 per year. A contrast from 1885 will show the following: —

Number of houses in 1885 was	9,106
Number of houses in 1894 are	12,324

The valuation of assessed property in Cambridge in 1885 was $55,346,555; the valuation in 1894 reached the amount of $77,535,620. The population in 1885 was 59,658; in 1894 it is about 85,000. During and between these periods there has been built the Harvard Bridge, of vast importance and benefit to our city, opening up, as it does, a near approach to the most attractive part of Boston, her magnificent parks and driveways. Our streets have been extensively widened, extended, and improved, new thoroughfares have been laid out, and a comprehensive system of parks has been inaugurated, with work rapidly progressing. The electric service has been adopted for travel and to light our streets, as well as our business houses and homes; and the large increase in our schools and public buildings all speak loudly of our advance in domestic and active life.

Our city has become known throughout the world, and her people are vigorous, enterprising, and full of hope in her advanced greatness and influences.

In retiring once more to private life and severing my connections with the affairs of a public official, I can only bespeak for my successor the kindest words; and to those who have aided me in my duties I return my sincere thanks, and sincerely hope they will always strive in the future, as they have in the past, to assist in making our city above reproach.

Respectfully submitted,

BENJ. H. STEELE, *Inspector of Buildings.*

REPORT OF THE COMMITTEE ON SOLDIERS' AID.

The Committee on Soldiers' Aid submits to the City Council its report for the year ending November 30, 1894: —

The amount paid as regular State Aid was	$12,840 00
The amount paid to indigent soldiers and sailors was	2,565 00
The amount paid as soldiers' relief was	6,295 50
The amount paid for the burial of deceased indigent or friendless soldiers or sailors was	350 00
The amount paid to the clerk and agent employed in the examination of settlements, etc., was	900 00
Printing and stationery	104 99
Aid by cities and towns	108 38
Board and care of sundry persons	1,396 93
Car tickets	10 00
Fuel	45 10
Sundry supplies	53 65
Total	$24,669 55
The amount received from the Commonwealth was	15,196 39
The amount received from other towns and cities was	120 44
For sundry authorized payments which were not paid	208 50
	$15,525 33

There are now upon the State aid list 245 persons, and upon the list of indigent soldiers and sailors, 21. The number of persons upon the soldiers' relief act list is 76.

All of which is respectfully submitted.

E. B. JAMES,
PETER F. ROURKE,
WALTER H. LERNED,
PETER P. BLEILER,
CHAS. W. CHENEY,
Committee on Soldiers' Aid.

REPORT OF THE BOARD OF CEMETERY COMMISSIONERS.

CAMBRIDGE, December 27, 1894.

To the Honorable the City Council : —

The Board of Commissioners of the Cambridge Cemetery respectfully submits its forty-first annual report, the same being for the year ending November 30, 1894 : —

The amount appropriated at the beginning of the year was	$18.000 00
The total amount of expenditures was	17,998 89
Balance of appropriation unexpended	$1 11

For a detailed account of expenses, reference is made to the Auditor's Report.

The receipts of the year have been as follows : —

Burial and tomb fees	$4,528 00
Care of lots	3,659 92
Sale of lots and graves	6,675 13
Foundations, brick graves, etc.	1,515 24
Interest on Cemetery Fund	1,128 05
Sundries (including rent)	824 71
Total	18,331 05
The estimated revenue was	18,000 00
Excess of revenue over estimate	$331 05

In its estimate of receipts for 1894, transmitted to the Mayor in January last, this Board submitted as its estimate that the probable income of the Cemetery would equal $19,000. While this sum was somewhat less than that received in the previous year, it was believed to be a fair and conservative estimate. The receipts have not quite realized the expectation of this Board, as will be seen by an examination of the above table.

The depressing influences which have been so prevalent in business circles during the past two years have had a discouraging effect upon the income of this department, the amount received from the sales of lots being some $1,200 lower than in 1893, $1,500 less than in 1892, and, with the exception of 1891, the lowest in seven years. The increase in the number of sales of graves and small lots would seem to verify this assertion.

Despite these facts, however, the general income has been in a large measure maintained.

The actual expense of maintenance has been $16,281.39, a decrease of almost $500.

The extreme drought which prevailed during the summer months rendered the care of the grounds no easy task, and the special efforts exerted were apparently successful, as little complaint has been heard from lot owners or any of our citizens.

The water system of the Cemetery has been extended so as to meet the wants of the newly laid out territory, and its introduction has proven valuable in the performance of the Cemetery work, as well as a source of great convenience to proprietors of lots or graves.

The newer section of the Cemetery has been gradually opened for use. New ranges have been laid out, and lots and graves prepared for sale. During the coming season, the City Engineer's plan for the arrangement of the remaining unused portions of the grounds will be completed, and the entire territory laid out for disposal.

The Superintendent, in his annual report to this Board, enumerates the extent of work accomplished, and from this report the following items are extracted and compared with the corresponding results for the year 1893.

	1893	1894
Number of lots prepared	27	50
Estimated value of same	$4,050 00	$14,402 32
Number of lots ready for sale	140½	180
Estimated value of same	$46,156 34	$51,599 62

Number of single graves ready for sale	73	42
Estimated value of same	$1,460 00	$840 00
Number of interments	656	664
Number of removals to other cemeteries	12	15
Number of interments in Cemetery (total)	19,036	19,685
Number of burials (Overseers of the Poor)	43	71

The matter of securing more territory for burial purposes has been suggested to the City Council during several years past, and the disposal of a considerable portion during the past year has not been calculated to diminish the advisability of taking some steps to secure additional territory. When the new plan of the ground at disposal has been submitted, it is hoped that the immediate need of securing additional ground will not be so urgent as it at present appears to be. Any considerable delay, however, can only result in securing a temporary respite which may prove costly.

With the steadily increasing population of Cambridge, and the added demand for burial places as a natural consequence, it would seem that it is venturesome to much longer hesitate about taking steps to bond or secure more territory.

During the past season, in conjunction with the Committee on Health of the City Council, the adjoining territory was examined and a proposal for its purchase obtained from its owners. The price submitted appeared to this Board to be exorbitant, and the advisability is suggested of petitioning the County Commissioners for authority to take this or other property for the uses of the Cemetery.

The number of lots which are being placed in perpetual care is constantly increasing, and indicates a decided confidence among lot owners in this method of caring for lots and graves.

The following items on the perpetual care of lots are submitted: —

Number of lots placed under perpetual care in 1894	16
Number of lots placed under perpetual care (total)	236
Received for perpetual care in 1894	$1,781 75
Amount of fund for perpetual care of lots	$31,694 14
Interest accumulations from invested funds	$1,128 05

Ward One Burial Ground.

The Ward One Burial Ground has been given the usual care and attention. Such repairs as were needed have been attended to, and the cost of maintenance for the year has been $129.21. The body of Mary J. Whitney, who died Dec. 2, 1893, aged seventy-eight years, four months, was interred in the tomb of Messrs. Russell and Whitney.

An interment in this burial-ground rarely occurs at the present time, and it might be well to consider the wisdom of closing it for any future burials, except in the event of interment in tombs.

Deeds in Trust.

For many years it has been suggested to this Board that it might be desirable to accept a reconveyance in trust to the City of any lot upon certain specified conditions which would be mentioned in the deed of reconveyance. At different times, proprietors of lots have signified a desire to deed to the city in trust the lots owned by them. This practice has existed in other cemeteries for many years, and apparently with entire satisfaction and success.

It has been well understood that the reconveyance of lots in this manner would undoubtedly prevent many of the annoying and altogether unnecessary difficulties which constantly arise among heirs to lots, and would also tend to continue the good appearance of the Cemetery, by providing the means to care for lots after the owners or heirs had died, or if, for any reason, the lot would ordinarily be neglected; yet this Board has hesitated in placing any additional liability upon the City, and has been loath to inaugurate a new feature of such a character, unless there appeared to be a demand for it among the proprietors of lots in the Cemetery.

As several applications for permission to reconvey have been received, this Board decided that it was advisable to accept such deeds, and requested the City Council to pass an ordinance which would permit the execution of deeds in trust. Such an ordinance was submitted and approved on March 29

last. Since that time the preparation of a proper form of deed has been receiving the attention of the City Solicitor, and early in the coming season the Board will be ready to consider the reconveyance of lots as indicated herein.

New Iron Fence.

We are pleased to note the completion of the new iron fence from the northerly line of the Cemetery to a point opposite the house of the Superintendent, and the removal of the old wooden fence and stone wall. For many years past, this Board has remarked on the unsightly appearance and unsafe condition of the old entrance to the Cemetery, and recommended the erection of a new gateway and adjoining fence; but until the present year, the change has never been accomplished. With the new gateway, completed last year, and the fence, just finished, it is believed that the Cemetery has at last secured an entrance in which citizens and lot owners may experience a justifiable pride.

To properly construct the fence, and with a view to the artistic appearance of the surroundings, it was deemed advisable to cut away a portion of the knoll near the house of the Superintendent. A change in the grade of Coolidge Avenue was made, as requested by this Board. This necessitated a change in the grade of the adjacent ground, and will compel additional work the coming season before final completion. The sidewalk has been curbed along the line of the new fence, and a stone driveway and circles laid at the entrance. The cost of these improvements — all of which has been met from the current receipts of the Cemetery — has been $2,318.37, divided as follows: —

New fence (including removal of old fence, and sundry expenses incidental to construction)	$1,717 50
Inside grating	325 00
Driveway and curbings	275 87

The contract for the construction of the fence was awarded to the Belmont Iron Works, Ltd., of Philadelphia, Penn., at its bid of $1,374.

Soldiers and Sailors' Lot.

In the last report, this Board recommended "that the authorization of the City Council be given to extend the Soldiers' Lot in the manner which may appear to it to be most feasible."

In compliance with the intent of this recommendation, the City Council, by an order approved January 23, 1894, authorized this Board "to extend the Soldiers and Sailors' Lot as it might deem best, and also to determine who should be buried therein."

The matter of this extension has been considered with the utmost care, and due allowance has been given to all shades of opinion. It was at first contemplated to increase the capacity for burials in the old Soldiers' Lot by laying out the piece of unoccupied land adjoining, and by a change in the lines of the avenues and paths in the immediate vicinity. Inasmuch as the rights of lot owners, and the desirability of their holdings might be affected by any change in the lines of the existing avenues and paths, and further, in view of the fact that the use of all the available ground would allow a very limited number of burials in the future, — far less than might reasonably be expected would be needed, and so would entail upon future Boards the necessity of providing a place of burial elsewhere, — it was eventually decided to set aside for the purpose of a lot, a tract of land sufficiently large to meet all probable requirements.

The place selected is in the most conspicuous and beautiful portion of the Cemetery grounds, within 100 feet of the main entrance, and will permit the burial of 206 bodies, with a reserve space sufficient for twice that number.

In this lot small areas have been left for ornamental purposes, and it is the intention of this Board to use for ornamentation the open spot between the westerly line of the new lot and Cooledge Avenue.

The ladies connected with the several Women's Relief Corps in Cambridge have signified their intention to place in this new lot a beautiful vase, which will be commemorative of the patriotism and valor of the heroic dead.

With the completion of the necessary grading, and the laying out of the proposed new paths, with the erection of the ornamental vase above mentioned, with the cultivation of the plants and shrubbery in the vicinity, as contemplated by this Board, the new lot will be eminently fitting for the honorable burial of those soldiers and sailors of the late Civil War "who may die within the limits of the City of Cambridge, and for whose interment their relatives may be unable to provide proper means, or who, having no relatives, do not leave sufficient property to pay for suitable burial."

During the year everything that willing hands and tender care could perform, has been done to continue the well-kept appearance of the present lot. There have been five burials, making a total of 113. The expense of maintaining has been $402.50, as follows: —

Expended for headstones	$118 00
Foundations	18 00
Care and repairs	266 50

Other than as herein suggested, this Board has no special recommendations to urge.

For forty years the citizens of Cambridge have been enabled to secure to themselves an asylum of rest in a place which has become a veritable "City of the Dead." Since the dedication of the Cemetery, on November 1, 1854, its territorial extent has been almost doubled. New ideas in management have been instituted whenever deemed necessary to keep pace with the progress of events, earnest efforts have ever been directed to the adornment and beautifying of this last resting-place of so many who have labored to the credit and honor of the municipal, business, and private life of our city, until we can truly say that our Cemetery can favorably compare with others of longer existence.

The neat and orderly appearance of the avenues and paths, the graceful entrance, the numerous ornamental spaces, the many conveniences, attest the care of the city. Proprietors of lots have adorned and beautified their several holdings, and this Board has endeavored to conduct the affairs entrusted to it with discretion and zeal, always mindful of the query of

Rev. Dr. Albro in his dedication address, "Where should we rather choose to lie in death, than in a spot hallowed in our memory as the first dwelling-place of freedom and religion in this land?"

Respectfully submitted,

GEORGE S. SAUNDERS,
HERBERT A. CHASE,
CHAS. O. WELCH,
NATHAN C. LOMBARD,
HENRY A. DOHERTY.
WILLIAM A. BERTSCH.

Commissioners of Cambridge Cemetery.

REPORT OF THE CITY ENGINEER.

OFFICE OF THE CITY ENGINEER, CITY HALL,
CAMBRIDGE, December 1, 1894.

To the Honorable the City Council: —

The twenty-eighth annual report of the City Engineer, showing the operations and expenditures of the departments of Engineering and Sewers for the year ending December 1, 1894, is herewith respectfully submitted.

Office.

In consequence of the large amount of extra work called for by the Water and Park Departments, the number of assistants employed has been greatly increased. Twenty-one assistants have been employed at various times during the year, six permanently, besides the clerk and typewriter.

The usual summary of the year's work that can be itemized is given below: —

For the Street Department.

Number of street lines given	170
Number of street grades given	190
Number of cars measured (cracked stone)	228
Number of streets on which paving, curb, etc., was measured	120
Number of assessments prepared	344
Number of profiles prepared	20

For the Sewer Department.

Number of lines given	122
Number of grades given	141
Number of sewers measured	30
Number of plans or profiles prepared	32
Number of sewer assessments prepared	100

For Private Parties.

Number of street lines given	85
Number of street grades given	111

Miscellaneous Work.

Number of houses measured	356
Number of plans or profiles prepared	103
Number of surveys or levels made	97
Number of streets renumbered	9
Number of surveys at cemetery	15

There are now on file in the office 4,002 plans.

New City Map.

The new map of the city, to which reference was made last year, was completed in the early part of this season, and a large number of prints in two sizes was made for the use of the departments and citizens of the city. The map is very carefully drawn from surveys made by this department.

Some of the more prominent points of the city — as City Hall Tower, Mt. Auburn Tower, City Building, Ward One, Tufts College Tower, Squire's Factory, and the State House, Boston — were located by triangulation, and these were connected with similar work done by the United States Coast Survey and the Massachusetts Town Boundary Survey.

Having the positions of these points thus determined, the rest of the map has been carefully connected with and drawn from them.

The area of the city to the Harbor Commissioners' line of the river by this plan is 4,182.48 acres or 6.535 square miles.

From April a party of three assistants has been constantly employed on work connected with the Park Department.

During the year four or more assistants with helpers have been engaged on work connected with the proposed Water Works Extension.

Financial.

The appropriation for engineering was		$15,000 00
Expended for salary of City Engineer and sundry assistants	$12,812 22	
Expended for clerks' salaries	361 00	
Expended for new city maps	521 16	
Expended for sundry supplies, car tickets, etc.	805 15	
Unexpended balance	500 47	
Total		$15,000 00

Revenue from Park Department	$1,217 08
Revenue from Water Works Department	3,258 11
	$4,475 19

Main Street Bulkhead.

In order to fill the flats owned by the city on Main Street near the junction of Harvard Street, it became necessary to construct a pile and timber bulkhead from the corner of Smith's wharf across these flats to the bulkhead of the Charles River Embankment Company.

In accordance with an order approved July 26, 1894, appropriating money therefor, a contract was made with Trumbull & Ryan, and 240.5 feet of bulkhead built, at a total cost of $779.97.

Bridges.

The bridges of the city are in fair condition, and will require only the usual repairs and renewal.

The following statistics relating to bridges are reprinted from last year's report: —

Bridges Maintained Wholly or in Part by the City of Cambridge.

Name of Bridge.	Location.	Materials in Substructure.	Materials in Superstructure.	Date of first Construction.	Total Length of Bridge.	Length in Cambridge.	Width of Bridge.	Width at Draw.	Draw Opening.	Surface Area of Bridge in Cambridge.
							ft.	ft.	ft.	Sq. ft.
Boylston Street Bridge	over Charles River	Oak Piles	Wood.	1662	208.0	106.0	28.00	20.35	36.00	2,830
Brookline Bridge	over Charles River	Oak Piles	Wood	1850	750.0	175.0	31.00	24.00	36.00	5,299
Craigie Bridge	over Charles River	Oak Piles	Wood	1808	1268.0	634.0	65.00	50.00	35.83	41,210
First Street Bridge	over Broad Canal	Oak Piles	Wood	1892	115.0	115.0	45.00	32.00	36.00	4,707
Huron Avenue Bridge	over Pipe Way	Granite Masonry	Steel	1893	75.0	75.0	58.00			4,350
Harvard Bridge	over Charles River	Granite Piers	Iron	1891	2166.0	1113.0	69.33	48.33	36.67	75,514
Huron Avenue Bridge	over Watertown Branch of the Fitchburg R.R.	Granite Masonry	Steel	1893	93.63	93.63	58.00			5,430
Prison Point Bridge	over Miller's River	Oak Piles	Wood	1833	200.00	60.0	50.00	30.00	36.00	2,640
River Street Bridge	over Charles River	Oak Piles	Wood	1810	345.00	187.0	40.00	28.00	36.25	7,263
Sixth Street Bridge	over Broad Canal	Oak Piles	Wood	1873	79.5	79.5	42.00	32.00	32.50	3,014
Third Street Bridge	over Broad Canal	Oak Piles	Wood	about 1832	81.0	81.0	35.00	27.00	30.00	2,595
Walden Street Bridge	over Fitchburg R.R.	Granite Masonry	Steel	1892	64.0	64.0	42.00			2,688
Western Avenue Bridge	over Charles River	Oak Piles	Wood.	1824	330.0	168.0	34.00	27.50	36.00	5,595
West Boston Bridge	over Charles River	Oak Piles	Wood	1793	2740.0	1370.0	50.00	38.00	36.00	68,500
					8515.13	4321.13				231,635

Street Widenings.

During the year many projects for street widening and extension have been considered and estimates prepared.

Huron Avenue Extension.

Wyeth Street has been widened to a width of 50 feet and extended to a junction with Brendon Street and Lambert Avenue, and a portion of the latter west of Raymond Street has been widened to 50 feet in width, a total length of 2,060 feet, and the entire street renamed "Huron Avenue."

Mt. Auburn Street.

Several plans for widening Mt. Auburn Street its entire length were considered and estimates of cost prepared. It was finally decided by an order dated June 6, 1894, to widen the street from a point near Coolidge Avenue to its junction with Brattle Street, a distance of 885.0 feet, making the street not less than 66 feet wide at any point. The entire length of the street has been graded or surfaced, curbs set where needed, and a double line of street railway laid. It now presents a fine appearance.

Martin Street.

By an order approved April 25, 1894, Norton Street from Bowdoin Street to Avon Street, a distance of 518 feet, was widened to a width of 35.00 feet, and the name changed to "Martin Street."

Inman Square.

Inman Square was enlarged by taking a small area of land at the junction of Cambridge and Line Streets. Order dated Nov. 13, 1894.

Commercial Avenue.

In anticipation of the requirements of the city when the proposed park east of Commercial Avenue should be laid out, and also to facilitate the construction of the Metropolitan sewer connection, a parcel of land was taken and laid out as "Commercial Avenue" from Bridge Street to the southerly side of a dock or canal, a distance of 369 feet. As some of the land on

the westerly side intended to be laid out for the street was occupied by expensive buildings connected with the coal business of Horatio Wellington & Co., this strip of land, varying in width from about 5 to 7 feet, was not taken.

Concord Avenue and Boylston Street.

Several plans and estimates have also been prepared for widening Concord Avenue and Boylston Street, but no action has as yet been taken on either of the matters.

Massachusetts Avenue.

By an order dated March 30, 1894, the names of Front and Main Streets, Harvard Square, and North Avenue were changed to "Massachusetts Avenue" and the entire street renumbered.

Harvard Street.

A highly desirable improvement has been accomplished in the widening of that part of Harvard Street between Harvard Square and Quincy Square. The widening was made on the northerly side to a width of not less than 70 feet, — the authorities of Harvard College giving the land therefor, — and the roadway paved with sheet asphalt. It is to be hoped that this practical demonstration of the many desirable qualities of asphalt pavement will result in a much extended use of the same in this city. It is now generally conceded that for streets not carrying the heaviest traffic no pavement possesses so many qualities of excellence as this.

The streets laid out and those on which grades have been established are shown in the accompanying table.

Streets Laid Out and Grades Established December 1, 1893, to December 1, 1894.

STREET.					PLAN.		
Name.	From	To	Length in feet.	Width in feet.	Accepted.	Made by	Date.
Appleton Street	Concord Avenue	Vassal Lane	695	40	Dec. 22, 1893	W. A. Mason & Son.	April 20, 1878
Brendon Street	Huron Avenue	Raymond Street	427	40	May 21, 1894	City Engineer	June 1, 1893
Commercial Avenue	Bridge Street	S. W. Line of Canal	369	60	Mar. 7, 1894	City Engineer	March 5, 1894
Coolidge Avenue*	Line Mt. Auburn Corporation	Southerly	700		May 2, 1894	City Engineer	April 20, 1894
Crescent Street	Oxford Street	Sacramento Street	660	30	June 6, 1894	W. A. Mason & Son.	April 19, 1894
Davenport Street	Former Westerly End	Massachusetts Avenue	197	35	Sept. 5, 1894	E. F. Bowker	May 11, 1894
Fairmont Avenue	Fairmont Street	Somerset Street	430	30	July 10, 1894	W. A. Mason & Son.	May 1, 1884
Hammond Street	Oxford Street	Carver Street	1,142	40	Dec. 19, 1893	W. A. Mason & Son.	Oct. 23, 1893
Harvey Street	Cedar Street	Westerly	759	30	Nov. 28, 1894	W. A. Mason & Son.	June 20, 1894
Howland Street	Hammond Street	Wendell Street	273	40	Nov. 28, 1894	Chas. A. Pearson	Sept. 27, 1894
Huron Avenue	Concord Avenue	Raymond Street	2,060	50	May 21, 1894	City Engineer	June 1, 1893
Huron Avenue	Watertown Bridge R. R.	Cushing Street	1,360	70	May 23, 1894	City Engineer	July 17, 1893
Larch Street*	Huron Avenue	Watertown Bridge R.R.	515	40	May 2, 1894	E. F. Bowker	March 6, 1894
Martin Street	Bowdoin Street	Avon Street	518	35	Apr. 25, 1894	E. F. Bowker	Oct. 8, 1892
Mt. Auburn Street*	Story Street	Brattle Street	5,786	66	Feb. 28, 1894	City Engineer	May 10, 1883
Plymouth Street	Webster Avenue	Portland Street	700	40	May 31, 1894	W. A. Mason & Son.	April 26, 1894
Saville Street	Walden Street	Appleton Street	357	40	Dec. 22, 1893	W. A. Mason & Son.	June 20, 1893
Somerset Street	Pleasant Street	Walnut Court	249	30	Nov. 28, 1894	W. A. Mason & Son.	June 28, 1889
Walker Street	Shepherd Street	Linnæan Street	824	40	Oct. 17, 1894	W. A. Mason & Son.	July 24, 1892
Wendell Street	Oxford Street	Carver Street	900	40	Nov. 28, 1894	W. A. Mason & Son.	June 25, 1894
Worthington Street	Lexington Avenue	Lake View Avenue	305	40	Oct. 17, 1894	City Engineer	Oct. 1, 1894

* Grade established.

Total length of streets accepted during the year, 12,125 feet = 2.296 miles.
Total length of streets accepted Dec. 1, 1894, 84.194 miles.

Cemetery.

The various calls for work at the Cemetery have been met as usual. The new fence which was begun last year by erecting the gateway, was completed this season. The fence is of iron on stone base posts, and was erected by the Belmont Iron Works, Limited, of Philadelphia. The total amount of their contract was $1,433.

Sewers.

9247.9 feet or 1.751 miles of sewers have been constructed, making a total length in the city of 95.249 miles. The total cost to date of this construction has been $1,170,295.46.

All these sewers have been built by day labor in charge of the Superintendent of Sewers, under the general direction of the City Engineer.

Catch Basins.

In compliance with sundry petitions there have been built 34 catch basins, at a cost of $2,372.26, not including in this amount the cost of four catch basins paid for by the Street Department. Four thousand five hundred and three loads of material have been removed from 1,393 catch basins, at a cost of $3,242.50. This work has been done by day labor. Thirty-four catch basins have been repaired.

Bridge Street Sewer Outlet.

The dredging of flats about the outlet of the Bridge Street sewer was done by contract with Boynton Brothers, of Boston, at a cost of 64 cents per cubic yard.

A large bar or shoal having formed near the end of the submerged pipe outlet of the sewer, a further contract was made with Boynton Brothers to remove the same to a grade 3 feet below low water. The total amount paid under these two contracts was $4,108.24, five ninths of this sum being paid by the city of Somerville.

Metropolitan Sewer and Connections.

It is expected now that the North Metropolitan Sewer will be put in operation in the spring of 1895, but comparatively little work remaining to be done upon it.

Work on the principal connection, in Binney Street and Commercial Avenue, has been carried on the past season and is now nearly completed. This connection is designed to intercept the sewer in Bridge Street at a point opposite Prison Point Street, and passes by an inverted syphon under a canal or dock, thence through Commercial Avenue to Binney Street, thence through Binney Street, intercepting on its way the sewers in First, Second, Third, Fifth, Ninth Streets, and the sewer in Portland Street. It makes a connection with the Cambridge branch of the Metropolitan Sewer at the corner of Binney and Portland Streets. The part in Binney Street is of brick, and has been built by day labor, work having been begun in January, 1894, and kept up continuously until its completion.

The part in Commercial Avenue is of cast-iron pipe on a pile foundation, and is now under contract by Mr. John T. Scully, who has accomplished the larger part of the work.

The inverted syphon under the canal is being constructed by William L. Miller, under contract not yet completed.

The following table shows the amount of sewers constructed during the year : —

Sewers Constructed between Dec. 1, 1893, and Dec. 1, 1894.

Location.			Construction.							Total Cost.
Street.	From	To	Material.	Size in Inches.	Av. depth of Cut.	Man-holes.	Lamp-holes.	Inlets.	Length in feet.	
Avon Hill....	Lambert Ave.....	Southerly	Portland pipe.	10	8.6		1	4	110.2	$111 76
Belmont.....	Cushing St.	Westerly	" "	15	9.9	1		15	233.0	353 63
Binney	Portland St.....	Commereial Ave.	Brick.	38x34 32x28, 29x25	19.5	11			3942.3	
Camden Plaee	Mt. Auburn St. ..	Northerly	Portland pipe.	8	7.4		1	11	171.0	168 31
Clay.....	Spruee St.....	Northerly	" "	10	10.4			10	173.9	145 08
Cushing Ave.	End of old sewer	Westerly	Briek.	28¼x21⅞	14.6			6	89.7	574 93
Davenport ...	" "	Near North Ave.....	Portland pipe.	10	7.5		1	12	152.9	77 12
Ellery	" "	Near Harvard St.....	" "	10	6.5	1		3	35.0	44 06
Ellsworth Pk.	Ellsworth Ave. ..	Easterly.....	" "	10	8.5		1	16	237.2	167 20
Groveland....	Railroad St. sewer	Northerly	" "	12	9.0				407.9	453 34
Huron Ave. ..	Garden Ct. sewer	Sou'easterly, Nor'west'ly	" "	10	8.0	1	1	24	319.1	357 33
" " ..	Dublin St.	Northeasterly	" "	12 and 10	9.2	1	1	31	411.4	408 61
" " ..	Lake View Ave...	Near Lexington Ave	" "	10	9.4	1		18	290.9	375 67
" " ..	Lexington Ave...	Near Fresh Pond Lane...	" "	15 and 10	9.4	2	1	61	868.1	1,168 11
Kennedy Ave.	Brattle St.....	Northerly	" "	10	8.8		1	17	316.8	240 90
Loeke	Frank St.	Woodbridge St	" "	10	7.4	1		12	201.4	157 58
Miller Ave....	Orehard St.	Near Elm St. (Somerville)	" "	10	4.1		1	20	320.8	117 50

Sewers Constructed between Dec. 1, 1893, and Dec. 1, 1894. — *Continued.*

Location.			Construction.							Total Cost.
Street.	From	To	Material.	Size in Inches.	Av. depth of Cut.	Man-holes.	Lamp-holes.	Inlets.	Length in feet.	
Moore	Harvard St.....	Near Broadway	Portland pipe.	10	8.6		1	20	261.9	$351 97
Second *	Binney St.....	Northerly	Portland pipe and brick.	15 and 10	6.3	1	1	32	432.6	1,342 31
Seventh	End of old sewer.	Near Cambridge St.	Portland pipe.	10	6.0			2	8.5	13 74
Tenney	" "	Near Elm St. (Somerville)	" "	10	4.0		1	9	139.2	59 90
Vineyard	Cushing St.....	Westerly	" "	10	8.6		1	14	209.0	363 00
Winthrop	End of old sewer.	Near Boylston St.....	" "	10	9.0			2	15.1	13 33
						20	13	339	9247.9	$7,065 38

* Pile foundation.

Sewers Reconstructed between Dec. 1, 1893, and Dec. 1, 1894.

Location.			Construction.							Total Cost.
Street.	From	To	Material.	Size in inches.	Av. depth of Cut.	Man-holes.	Lamp-holes.	Inlets.	Length in feet.	
Central Sq. (see River St.)	Main St.	River St.								
River	Central Sq.	Cottage St.	Portland pipe.	12, 10 and 8	10.7	4	1	50	1316.0	*$1,516 85
North	Water St.	Leehmere Pl.	" "	12 and 10	11.3	2	1	40	578.1	975 95
Short	Bridge St.	Water St.	" "	15	12.6			24	258.2	861 30
Water	North St.	Near Bridge St.	" "	10	10.3	1	1	15	167.9	305 41
						7	3	129	2320.2	$3,659 51

* Includes cost of Central Sq. sewer.

Financial.

Sewers (Construction, Sundry Sewers).

Appropriation		$23,000 00
Transferred to Sewers (Maintenance)		5,000 00
Total		$18,000 00
Revenue from assessments	$6,815 83	
Amount expended		16,187 35
Balance unexpended		1,812 65
Total		$18,000 00

Sewers (Maintenance).

Appropriation		$18,000 00
Transferred from Sewers (Construction)		5,000 00
Total		$23,000 00
Expended		18,058 23
Balance unexpended		4,941 77
Total		$23,000 00
Revenue	$2,752 42	

Metropolitan Sewer Connections.

Appropriation	$75,000 00
Expended	58,389 85
Balance unexpended	16,610 15
Total	$75,000 00

Water Works.

Robert's Dam.

Water has wasted over the dam 164 days during the year, and for 201 days was below the crest of the dam. The highest water recorded was on March 7, 1894, when it reached elevation $82\frac{24}{100}$, or $1\frac{24}{100}$ feet above the crest of the dam; 118,400,000 gallons of water passed the dam on that day. The lowest water was reached Oct. 25, 1894, at elevation $68\frac{4}{100}$, or $12\frac{96}{100}$ feet below the crest of the dam.

Water was wasted over the dam 164 days as follows: —

December, 1893	35,800,000 gallons
January, 1894	166,500,000 gallons
February, 1894	375,000,000 gallons
March, 1894	1,176,800,000 gallons

April,	1894	806,900,000 gallons
May,	1894	199,200,000 gallons
June,	1894	92,400,000 gallons
July,	1894	
August,	1894	
September,	1894	
October,	1894	
November,	1894	

Total number of gallons passing the dam during the year, 2,852,600,000.

Fresh Pond.

The highest water was reached June 1, 1894, elevation $17\frac{15}{100}$, or $\frac{30}{100}$ feet above high-water mark of the pond. The lowest water in the pond was reached Sept. 18, 1894, elevation $10\frac{65}{100}$, or $6\frac{2}{10}$ feet below low-water mark.

Owing to the extreme and long continued drought in July, August, and September, and the consequent low stage of water in Fresh Pond, fears were entertained that recourse would have to be had to auxiliary pumping, and plans were prepared and preparations made for placing a set of pumps on the shore of the pond. By drawing largely on the basin at Roberts' Dam, and a very careful use of water, with some providential rains, this necessity was obviated.

Water Works Extension.

After careful examination of the whole matter of extending the present water supply by constructing an additional storage basin at Hobbs' Brook, a new distributing reservoir, and a new high duty pumping engine with connecting force and supply mains, it was decided in December, 1893, to go on and construct the above named Works as recommended.

Hobbs' Brook Storage Basin.

Preliminary surveys and studies of the proposed basin were made in the fall and winter of 1893 and 1894. A site for the dam was selected, and complete surveys and plans prepared for the necessary land takings.

By an order of the City Council approved June 6, 1894, 894.77 acres of land in Waltham, Lincoln, and Lexington were taken for this purpose, and the surveys for the work of construction have been carried on continuously since that time.

The work of stripping the land of soil and muck at the upper end of this basin was begun in November by day labor, and is now being carried on. When completed it is estimated that this basin will contain at least one and one-half billion gallons of water available for use. This water it is proposed to gather up and store in the winter and spring months, and use during the summer droughts. Work should be prosecuted with all vigor at several points during the next season.

Payson Park Reservoir.

Plans were prepared for the construction of this reservoir, and bids were invited for the work in August, 1894. The bids not proving satisfactory, the work was readvertised; and on Oct. 29, 1894 a contract was signed by Richard A. Malone, of Lancaster, Penn., to construct the reservoir.

Owing to the lateness of the season when the contract was awarded, but little work has been accomplished by the contractor.

40″ Force and Supply Main.

Plans and specifications have been prepared for the new 40″ force main pipe to connect the engine house with the reservoir, and the supply main pipe to connect the reservoir with the distributing pipe system near Harvard Square. It is expected that the contract for these pipes, together with the valves, gates, and special fittings, will be placed at an early day.

The usual tables and data concerning rainfall will be found appended.

Respectfully submitted,

L. M. HASTINGS,

City Engineer.

Table showing Comparison by Months of Number of Days on which Rain fell, and Total Precipitation at Kendall Green, Roberts' Dam, Fresh Pond, and Harvard Observatory, December, 1, 1893, to December 1, 1894.

		1893.	1894.											Total.
		Dec.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	
Kendall Green.	No. of days on which rain fell.	10	8	6	5	6	7	3	6	6	6			
	Total Precipitation.	4.82	5.01	4.35	.97	5.51	3.22	.42	2.84	1.93	2.56			
Roberts' Dam.	No. of days on which rain fell.	11	8	6	3	7	9	3	9	4	6	10	8	84
	Total Precipitation.	5.26	3.63	3.46	1.07	3.20	3.66	.47	3.27	1.33	2.17	5.25	2.89	35.66
Fresh Pond.	No. of days on which rain fell.	15	11	9	7	9	15	3	10	8	8	9	14	118
	Total Precipitation.	5.23	3.05	2.91	.84	2.94	4.63	.81	2.88	1.63	2.40	5.19	3.34	35.85
Harvard Observatory.	No. of days on which rain fell.	13	11	9	6	7	11	3	7	6	5	8	12	108
	Total Precipitation.	4.79	3.33	3.59	.37	2.67	2.27	.38	2.56	1.83	2.42	5.23	3.49	32.93

Table Showing Rainfall at Kendall Green and Rolm in Weston and at the Fresh Pond Pumping Station (Cambridge Water Works) and the Harvard Observatory, Cambridge, December 1, 1893, to December 1, 1894.

DAY OF MONTH.	1893. DECEMBER.				1894. JANUARY.				FEBRUARY.				M		APRIL.				MAY.				JUNE.				JULY.				AUGUST.				SEPTEMBER.				OCTOBER.				1894. NOVEMBER.			
	Kendall Green.	Roberts Dam.	Fresh Pond.	Harvard Obs.	K. G	R. D.	F. P.	H. O.	K. G.	R. D.	F. P.	H. O.	K. G.	H. O.	K. G.	R. D.	F. P.	H. O.	K. G.	R. D.	F. P.	H. O.	K. G.	R. D.	F. P.	H. O.	K. G.	R. D.	F. P.	H. O.	K. G.	R. D.	F. P.	H. O.	K. G.	R. D.	F. P.	H. O.	K. G.	R. D.	F. P.	H. O.	K. G.	R. D.	F. P.	H. O.
1	.36		.35					.05	T		T	T												.09																			.24
2		.38	.37	.36																	.01		.35		.13				.08				.02									.02		
3		.50	1.50	.43																.05				.24		.13	.33		.15	.05	.72		.19	.05			.10				.69	T
4	.63	.95		1.15					.55		.12				.37		.36		.18		.18						T		.04	.16	.03	.37	.02	.15				.22		.10	.73			
5	1.65		.79		.05		.03			.28		.18				.40		.30		.20	.22	.05	T					.22				.05					.16		.30		.30			1.40	.63
6		.95		.87	.03	.11	.06	.03							T		T		.28	.22	.16	.22													.15	.08		.17		.02			.95		T
7																	.59			.07		.10	.02		.06		T		T														1.52
8												T					.36	.80														.19			.15					.20			.31	
9	.23		.35								.35				1.95	1.19	T	.31													.23			.22		.16	.37	.41		.12		.30		.32	.26	
10		.38		.33			.13		.57	.34	.31	.45		.01																			.25	T					.30	.28	1.30		.31	.01	.32
11			.02		.25	.16	.07	.13		.30		.15			T		.95		T				T					.06												1.10	1.40	.34				.27
12	.04			.05				.08			.86				2.54	1.17	.26	.97									T		.01																	
13									1.15	1.25	T	.81			.14	.07	.14	.10													.14		.30	.24						1.28			.02			
14			.24		T						.44	.72	.09		T	.08											.01		.04			.27	.07			.08	T	1.18		1.21		.13	.08	
15		.48	.57	.30			.26		1.37	.84	.40	.85	.06															.07			.01		.01		.24	.20		.08			.20		.04	
16	1.61	.44	.52	.53	.20	.35		.21				.09		.04																							.06	T							
17		.78		.47																	.01		T												.61	.31	.12	.10		T			.08		
18			.20		T		.17		.45		.21	.18							T		1.08	T																			.10	.02	.07	
19	.01		T	.04	.32	.20		.14	.26	.45	.19									.77	.14	.44											T			1.37	1.56					.02		.01	
20												.16							.57		.04	.17	T									.83			.05	.02	1.66							
21									T		T	T	.02				.09					T			.62	.19		.65	.93		.80	.64		.92	1.36					T			.20	.02
22	T		.02									T		.02	.23	.15		.05						.14		.06	1.20	.61	T	.97												.26		.17
23	.06		.02										.60	.22					T		.12		.05						.48													.01	T	
24		.09		.04	.38		.34							.04			.18		.53		.83	.21			T		.85	.26	.50													T	T	
25						.24		.33					T		.28	.14		.14	.06	.54	.02	.21					.29	.31		.51			T						1.35			.12	.12	
26					T				T		.03	T							T			.01						.64	.37	.32								1.40	.02	1.44			T	
27					1.10	1.12	.41	.66																						.34										.02		T			T	
28			T				.35	.13							T		.01				.63																									
29	.05		.06				1.02						.20	T					1.21	1.10	.46	.43					T		.28								T									
30		.08	.15	.07	2.68	.95	.21	1.29						.04						.30	.49	.20					.16	.45		.21					.05		.03	T		.22	T		.07		
31	.18	.23	.07	.15		.50		.24											.39	.41	.24	.23																	.59	.34	.24					
	4.82	5.26	5.23	4.79	5.01	3.63	3.05	3.33	4.35	3.46	2.91	3.59	.97	1.37	5.51	3.20	2.94	2.67	3.22	3.66	4.63	2.27	.42	.47	.81	.38	2.84	3.27	2.88	2.56	1.93	1.33	1.63	1.83	2.56	2.17	2.40	2.42	5.25	5.19	5.23		2.89	3.34	3.49	

REPORT OF THE SUPERINTENDENT OF STREETS.

To the Honorable, the City Council: —

GENTLEMEN: — In accordance with the requirements of the ordinance relating to streets, I have the honor to submit my first annual report for the financial year ending November 30, 1894.

I assumed the office of Superintendent of Streets May 1 of the current year; and though but five months of the financial year had passed at that time, more than one half of the two principal appropriations of this department, viz., "Maintenance" and "Paving Sidewalks," had been expended.

The account of the various appropriations of this department are here given in alphabetical order, as they appear on the Auditor's monthly statement.

Bridges.

Appropriation		$3,950 00
EXPENDED.		
Drawtenders' salaries	$2,791 96	
Labor, repairing bridges	253 63	
Contracts, replanking bridges	486 16	
Lumber	394 14	
Hardware, etc.	23 59	3,949 48
Balance		52

The above amount has been expended, as shown, for payment of salaries of drawtenders and the care and repairs of the several bridges of which this department has charge. All of these bridges, with the exception of the two new ones on Huron Avenue, will require replanking during the coming year, and an additional amount should be added to the appropriation for that purpose.

The following table shows the bridges cared for by the Street Department.

Bridges Maintained Wholly or in Part by the City of Cambridge, and in Charge of Street Department.

Name of Bridge.	Location.	Material in Substructure.	Material in Superstructure.	Date of first Construction.	Total Length of Bridge.	Length in Cambridge.	Width of Bridge	Width of Draw.	Draw Opening.	Surface Area of Bridge in Cambridge.
										Sq. ft.
Boylston Street Bridge	over Charles River	Oak Piles	Wood.	1662	208.0	106.0	28 ft.	20 35	36 ft.	2,830
Brookline Bridge	over Charles River	Oak Piles	Wood	1850	750.0	175.0	31	24	36	5,299
First Street Bridge	over Broad Canal	Oak Piles	Wood	1892	115.0	115.0	45	32	36	4,707
Fresh Pond Avenue Bridge.	over Pipe Way	Granite Masonry	Steel	1893	75.0	75.0	58			4,350
Huron Street Bridge	over Watertown Branch of the Fitchburg R.R.	Granite Masonry	Steel	1893	93.63	93.63	58			5,430
River Street Bridge	over Charles River	Oak Piles	Wood	1810	345.00	187.0	40	28	36 3 in.	7,263
Sixth Street Bridge	over Broad Canal	Oak Piles	Wood	1873	79.5	79.5	42	32	3 6 in.	3,014
Third Street Bridge	over Broad Canal	Oak Piles	Wood	about 1832	81.0	81.0	35	27	30	2,595
Walden Street Bridge	over Fitchburg R.R.	Granite Masonry	Steel	1892	64.0	64.0	42			2,688
Western Avenue Bridge	over Charles River	Oak Piles	Wood	1824	330.0	168.0	34	27.5	36	5,595

Cleaning Streets.

Appropriation		$15,575 00
EXPENDED.		
Labor	$12,550 33	
Teaming	2,243 87	
Tools and supplies	735 57	15,529 77
Balance		45 23

The above amount has been expended, as shown, for labor, teaming, and materials used in cleaning streets.

Every accepted street in the city has been thoroughly cleaned twice this year, and a large majority of them have been cleaned three times. It was the intention to have them all cleaned the third time, but the early frost and snow in November prevented it. All the paved streets have been swept once every three weeks. Nine thousand four hundred seventy-seven loads have been collected, of which 2,563 were sold, 2,994 were carted to the parks, and 3,920 were carted to the dump.

In addition to the ordinary street cleaning work, six men have been employed throughout the year, at some of the most prominent places in the city, to keep the streets and squares in these localities clean at all times; they were placed as follows: —

Main Street from Dana Street to Central Square.

Main Street from Central Square to the bridge.

Cambridge Street from railroad crossing to the bridge, including Bridge Street.

Harvard Square.

North Avenue.

This experiment has proven so satisfactory this year, that it is my intention to increase the force so as to cover all the main thoroughfares and public squares in the city.

In many cases the unsightly condition of our streets is due to the carelessness of our citizens, and could be easily remedied; for this purpose, during the coming year we intend to place in conspicuous places on main thoroughfares and public squares throughout the city, a number of receptacles, into which may be thrown scraps of paper, apple cores, orange and banana skins,

etc., such receptacles to be emptied by the city teams when filled. If the public will co-operate with us in this attempt to keep the streets clean at all times, I have no doubt that the result will prove most gratifying.

The practice of sweeping dirt from stores and dwellings to the sidewalks and gutters, is a continual source of annoyance and should be discontinued.

A "Barnard Castle" street scraping machine has been in use in cleaning graded streets this year, and the work has thereby been greatly facilitated. Another one of the same make was purchased late this year for similar use the coming season.

Collection of Ashes.

Appropriation		$16,850 00
EXPENDED.		
Labor	$13,023 20	
Hay and grain	1,727 92	
Harnesses, etc.	321 05	
Horses	1,525 00	
Wagons, covers, etc.	243 18	16,840 35
Balance		$9 65

The above amount has been expended, as shown, for labor, care and feed of horses, and expenses incidental to the work.

The increase in population, with the large number of houses annually erected in the city, has largely increased the work of this department, and will necessitate an enlargement of the force next year. There are at present employed in this work fourteen teams, seven helpers, and a dump man ; it will be necessary to add at least two teams and a helper the coming season, and I shall ask the Finance Committee to make provision for this increase when the budget is made up.

It has been the custom, until this year, to sell most of the ashes collected; but during the past year the greater part of it has been given to the Park Department, and our revenue from that source has been materially decreased; so that out of 28,000 loads collected, but about 2,850 were sold.

The condition of the ash dumps in the several sections of

the city has been greatly improved; the flats at the old City Wharf on Main Street, near Sixth Street, are rapidly being filled up, and a special officer is detailed there to prevent the accumulation of offensive matter.

Extension of Wyeth Street.

Appropriation		$13,767 81
EXPENDED.		
Labor	$4,836 16	
Teaming	4,458 65	
Edgestone	1,871 68	
Field stone	3,778 72	
Gravel and sand	571 75	
Bricks	50 10	13,695 37
Balance		$72 44

Wyeth Street has been widened to a width of fifty feet and extended to a junction with Lambert Avenue, and the latter widened to fifty feet west of Raymond Street, a total length of 2,060 feet; the entire street being renamed Huron Avenue.

The amount shown has been expended for labor and materials used in setting edgestones on both sides of, and macadamizing the street between, the points named.

The street has been built as thoroughly as possible, considering the unfavorable natural conditions of the foundation in this locality.

If the name of the remainder of Lambert Avenue is changed to Huron Avenue, we shall then have a continuous avenue with one name from Concord Avenue around Fresh Pond to North Avenue.

Maintenance.

Appropriation		$80,405 00
EXPENDED.		
Salaries and labor	$38,674 41	
Teaming	1,198 62	
Stone	13,683 28	
Gravel	1,363 95	
Stone crushers	7,424 04	
Amounts carried forward	$62,344 30	$80,405 00

Amounts brought forward	$62,344 30	$80,405 00
Hay and grain	7,316 79	
Horses, harnesses, carriages, wagons, repairs, etc.	2,653 57	
Fuel	1,542 25	
Office and incidental expenses	1,732 72	
Hardware, tools and supplies	2,357 04	
Stable fittings, repairs, etc.	1,334 60	79,281 27
Balance		$1,123 73

The original appropriation for this department was $86,000; over $5,000 of this was expended in the establishment of the new crusher plant at the Tannery Street Ledge, and $11,100 was expended for the purchase of paving blocks, a portion being used in the paving of Western Avenue and the balance being at present on hand. This left the appropriation for actual use of this part of the work less than $70,000, and nearly $12,000 less then it was the previous year.

The following schedule shows the streets graded in each of the districts, an itemized account of the cost of each street, and the total cost in each district: —

District No. 1 (Wards 2, 3, and 4).

Front Street, from Windsor Street to Railroad Crossing:		
Labor	$30 00	
Teaming	10 00	
Cracked stone	5 00	
		$45 00
Essex Street, from Harvard Street to Austin Street:		
Labor	26 00	
Teaming	47 50	
Rolling	7 00	
Cracked stone	95 00	
		175 50
River Street, from Central Square to Howard Street:		
Labor	314 00	
Teaming	282 50	
Rolling	42 00	
Cracked stone	640 00	
		1,278 50
Amount carried forward		$1,499 00

Amount brought forward		$1,499 00
Ellsworth Avenue, entire length:		
Labor	$203 00	
Teaming	330 00	
Gravel	26 70	
		559 70
Sixth Street, from Main Street to Broadway:		
Labor	94 50	
Teaming	105 00	
Rolling	7 00	
Cracked stone	275 00	
		481 50
Harvard Street, from Brewery Street to Moore Street:		
Labor	194 00	
Teaming	181 25	
Rolling	17 50	
Cracked stone	575 00	
		967 75
Thorndike Street, from Sixth Street to Ninth Street:		
Labor	88 00	
Teaming	180 00	
Rolling	28 00	
Cracked stone	282 50	
Gravel	19 00	
		547 50
Albany Street, from Front Street to Portland Street:		
Labor	372 50	
Teaming	530 00	
Rolling	56 00	
Cracked stone	952 50	
Gravel	40 20	
		1,951 20
State Street, from Front Street to Windsor Street:		
Labor	114 00	
Teaming	137 50	
Rolling	42 00	
Gravel	7 80	
		301 30
Third Street, from Main Street to Vine Street:		
Labor	142 00	
Teaming	163 75	
Rolling	77 00	
Cracked stone	215 00	
Gravel	11 70	
		609 45
Amount carried forward		6,917 40

Amount brought forward		$6,917 40	
Tremont Street, from Broadway to Hampshire Street:			
Labor	60 00		
Teaming	122 50		
Rolling	24 50		
Cracked stone	362 50		
Gravel	3 60		
		573 10	
Portsmouth Street entire:			
Labor	144 00		
Teaming	232 50		
Rolling	7 00		
Cracked stone	410 00		
Gravel	3 00		
		796 50	
Norfolk Street, from Broadway to Cambridge Street:			
Labor	133 00		
Teaming	217 50		
Rolling	63 00		
Cracked stone	762 50		
Gravel	27 30		
		1,203 30	
Sidney Street, from Front Street to Franklin Street:			
Labor	25 00		
Teaming	65 00		
Rolling	14 00		
Cracked stone	70 00		
Gravel	5 40		
		179 40	
Broadway, from Prospect Street to Dana Street:			
Labor	234 00		
Teaming	517 50		
Rolling	82 25		
Cracked stone	950 00		
Gravel	45 00		
		1,828 75	
Total, District No. 1			$11,498 45

District No. 2 (Wards 1 and 5).

Dublin Street, from Wyeth Square to Walden Street:			
Labor	40 00		
Teaming	115 00		
Rolling	3 50		
Gravel	24 90		
		183 40	
Amounts carried forward		$183 40	$11,498 45

Amounts brought forward . .		$183 40	$11,498 45
Parker Street, from Concord Avenue to Buckingham Street:			
Labor	90 00		
Teaming	455 00		
Rolling	7 00		
Gravel	109 80		
		661 80	
Lowell Street, from Brattle Street to Mt. Auburn Street:			
Labor	26 00		
Teaming	75 00		
Gravel	19 80		
		120 80	
North Avenue, from Garden Street to Waterhouse Street:			
Labor	162 00		
Teaming	330 00		
Rolling	45 50		
Cracked stone	507 50		
Gravel	3 30		
		1,048 30	
Hammond Street, entire:			
Labor	114 00		
Teaming	230 00		
Gravel	109 20		
		453 20	
Traill Street, entire:			
Labor	90 00		
Teaming	97 50		
Rolling	3 50		
Gravel	41 40		
		232 40	
Appleton Street, from Huron Avenue to Concord Avenue:			
Labor	143 00		
Teaming	417 50		
Rolling	7 00		
Gravel	121 80		
		689 30	
Coolidge Avenue, from Mt. Auburn Street to the Cemetery:			
Labor	113 50		
Teaming	50 00		
(Material taken from Mt. Auburn Street.)			
		163 50	
Haskell Street, entire:			
Labor	53 00		
Teaming	158 00		
Cracked stone	20 00		
Gravel	36 30		
		267 30	
Amounts carried forward . .		$3,820 00	$11,498 45

Amounts brought forward . .		$3,820 00	$11,498 45
Broadway, from Dana Street to Cambridge Street:			
Labor	48 00		
Teaming	150 00		
Cracked stone	275 00		
Gravel	6 30		
		479 30	
Huron Ave., from Fayerweather Street to Fresh Pond Lane:			
Labor	592 00		
Teaming	1,481 62		
Rolling	7 00		
Gravel	559 50		
		2,640 12	
Total, District No. 2			6,939 42
Total macadamizing			$18,437 87

In addition to the amount expended for grading streets, $5,984.12 in the first district, and $9,579.45 in the second district, making a total of $15,563.57, has been expended in "patching" and "minute repairs" on nearly all the streets in the city, and while this work is not entirely satisfactory, we shall be obliged to continue this policy until appropriations can be made large enough to allow more grading or macadamizing to be done each year.

A careful perusal of the preceding pages will show that the amount which we have been able to expend actually for labor and materials used directly on the streets, is less than $40,000, and with this small appropriation we are expected to keep in proper condition about eighty miles of streets, the greater part of them low, with poor foundations, and with serious defects in their original construction.

Most of the wear and tear of our streets is due to heavy teaming through the city from the surrounding towns, this city being the main thoroughfare to Boston. The only way in which these thoroughfares can be kept in proper condition is to heavily macadamize or pave the principal streets.

Much has been said recently, both in the public press and otherwise, about the condition of our streets; still, notwithstanding the increase in our population and the acceptance of new streets every year, the appropriation for the maintenance

of them has not been increased; on the contrary it has been cut down. Unless a radical change is made in the method of doing and the amount annually allowed for this work, I do not see how we can hope to materially improve the condition of our streets.

North Avenue its entire length should be thoroughly rebuilt during the coming year; Portland Street, Brookline Street, Concord Avenue, Magazine Street, Columbia Street, Garden Street, Third Street, Prospect Street, and a number of the other principal streets need immediate attention, and to bring our streets up to anywhere near what is expected of us, will require a considerable increase in the appropriation for this work. For the last eight or ten years, the necessity of the city owning a good gravel bank has annually been presented to the city government, but nothing has yet been done looking toward that end.

During the past season we have been compelled to pay thirty cents per load for gravel in the bank, which has amounted in the aggregate to 14,973 loads, at an expense of about $4,500. The principal uses for gravel in our work is for covering off and for paving work. A good bank for these purposes might be obtained in our immediate vicinity, and the outlay for it would be repaid to the city in a very few years.

For work upon the streets, we are replacing gravel as far as possible with cracked stone, which wears a great deal longer and makes the streets less muddy. During the past year a stone-crushing plant has been established at the City Ledge on Tannery Street, and we have been able to furnish this material for patching and grading more economically than ever before. We expect to run this plant and the old one at the Hampshire Street yard all winter, so that we may have an ample supply to begin work with early in the spring. There is an abundance of "Field Stone" in the surrounding towns, and Cambridge teamsters are enabled to haul it through the winter months, when otherwise their teams would remain idle.

With the increase in the use of cracked stone, comes the necessity for another steam road roller; during the past season, the two rollers owned by the department were at work day

and night, and were unable even then to keep up with the work, and I shall ask the incoming City Government early in the year for authority to purchase another machine.

On page 311 is a table of the streets accepted during the past year.

Paving Sidewalks.

Appropriation		$26,372 14
EXPENDED.		
Labor	$11,055 27	
Teaming	1,543 75	
Bricks	5,224 70	
Stone	7,808 25	
Gravel	142 55	
Lumber and cement	240 33	
Tools, etc.	215 85	
		26,230 70
Balance		$141 44

This appropriation has been expended for resetting old edgestones, relaying old brick sidewalks, setting new edgestones, laying new brick sidewalks, and new North River flagging crossings.

During the past year we have laid all the flagging on hand, but there still remains a great deal of new crossing work to be done. The demand for flagstone crossings annually increases, and there are hundreds of the old style block crossings which should be removed and flagging put in their places ; in addition to this there are a great many places where there are now no crossings and which are imperatively needed.

Following is a list of the streets where new North River flagging crossings have been laid this year :—

Portland Street at Hampshire Street.
Hammond Street at Oxford and Gorham Streets.
Brookline Street at Franklin Street.
Brookline Street at Green Street.
Webster Avenue at Lincoln Street.
Hampshire Street at Tremont Street.
Winter Street at Fifth Street.
Warren Street at Jefferson Street.

Warren Street at Porter Street.
North Avenue at Walden Street.
North Avenue at Arlington Street.
Haskell Street at Spruce Street.
Ellery Street at Broadway.
Broadway at Ellery Street.
Main Street at No. 269.
Bridge Street at Prison Point Street.
Sparks Street at Foster Street.
Foster Street at Sparks Street.
Main Street at Bow Street.
Inman Square.
North Avenue at Shepard Street.
Dana Street at Hancock Street.
Holworthy Street at Belmont Street.
Pleasant Street at Somerset Street.
Central Square.
Avon Hill Street at Norton Street.
Gray Street at Norton Street.
Vine Street at Sixth Street.
Oxford Street at Conant and Perkins Halls.
Cameron Street at North Avenue.
Cedar Street at North Avenue.
Locke Street at Meacham Street.
Pearl Street at Lake Street.
Concord Avenue at Craigie Street.
Brattle Square.
Cambridge Street at Felton Street.
Brattle Street at Sparks Street.
North Avenue at Martin Street.

At the beginning of this season we had on hand a good supply of paving materials, which has enabled us to do a large amount of new work, as will be seen by reference to the following schedule of new edgestones and brick sidewalks: —

District No. 1.

STREETS.	Linear Feet Straight Edgestone.	Linear Feet Circle Edgestone.	Square Yards Brick Sidewalk.	Amount.
Lopez Street, from Pearl to Brookline Streets	153			$138 37
Green Street, between Pearl and Brookline Streets			36	62 43
Brookline Street, between Auburn and Franklin Streets	71		143	272 96
Brookline Street, between Main and Green Streets	84		64	375 07
Hampshire Street, between Elm and Norfolk Streets	100			87 81
Pine Street, between Washington and Harvard Streets	224	3	55.5	292 78
Western Avenue, No. 17			108	111 74
Harvard Street, between Dana and Hancock Streets			80	46 53
Cambridge Street, between Tremont and Prospect Streets			78.5	67 20
Columbia Street, at Hampshire Street	45		127.5	81 87
Carlisle Street, from Prospect to Tremont Streets	520			582 31
Antrim Street, between Broadway and Cambridge Streets			250	341 37
Ellsworth Avenue, from No. 9 to Broadway	249.5		53	313 18
Brewery Street, from Harvard to Broadway	112			117 06
Sixth Street, from Harvard to Broadway	372			388 06
Green Street, from Hancock to Bay Streets	100			95 50
Blackstone Street, from Western Avenue to River Street	334		685	1,007 60
Amounts carried forward	2,364.5	3	1,680.5	$4,381 84

District No. 1. — *Continued*

STREETS.	Linear Feet Straight Edgestone.	Linear Feet Circle. Edgestone.	Square Yards Brick Sidewalk.	Amount.
Amounts brought forward	2,364.5	3	1,680.5	$4,381 84
Hancock Street, from Green to Franklin Streets	200.7	18.6		$231 50
Green Street, from No. 289 to No. 299	119			127 37
River Street, from No. 62 to Cottage Street			211	223 92
Pleasant Street, from Green to Franklin Streets			156	184 13
Thorndike Street, from Seventh to Ninth Streets	662	9.6		912 25
First Street, No. 8	67.5		54.5	118 21
Winter Street, from No. 28 to Fourth Street			124.5	194 69
Vine Street, from Third to Fourth Streets			251	287 15
Ellsworth Avenue, from Broadway to No. 19	336		452	904 98
Tremont Street, cor. Cambridge Street			90	76 00
Putnam Avenue, from Magazine to Pearl Streets	430		337	898 34
Pleasant Street, Nos. 30, 32, 32½			33.5	31 85
Bigelow Street, near Main Street	8.8		5.5	7 76
Western Avenue, North side at No. 75	176.5	13	946	1,202 95
River Street, Nos. 87–91	11		42	22 00
Pearl Street, from Green to Cottage Streets			124	66 70
Main Street, Nos. 424 and 426			52	40 10
Amounts carried forward	4,376	44.2	4,559.5	$9,911 74

District No. 1.—*Concluded.*

STREETS.	Linear Feet Straight Edgestone.	Linear Feet Circle Edgestone.	Square Yards Brick Sidewalk.	Amount.
Amounts brought forward	4,376	44.2	4,559.5	$9,911 74
Green Street, No. 70			25	$25 44
Main Street, between Putnam Avenue and Pleasant Street			692	799 44
Henry Street, between Pearl and Brookline Streets	407			429 75
Erie Street, Nos. 53 to 56	43.7			51 47
State Street, No. 8	22.5			24 25
Norfolk Street, cor. Austin Street	9		12	28 31
Green Street, Nos. 68 to 70	56.5			84 43
Gardner Street, cor. Tremont Street	96		62.5	108 09
Vine Street, Nos. 271 to 275	17			32 15
School Street, near Austin Street	137			142 20
Cambridge Street, at Leonard Avenue	19.5	13.7		109 79
Tremont Street, cor. Hampshire Street	110		277	395 00
Windsor Street, cor. Harvard Street	51.3			128 04
Auburn Street, from Brookline to Pearl Streets	289.5			304 78
Windsor Street, cor. Main Street			63.5	46 37
	5,635	57.9	5,691.5	$12,621 25

District No. 2.

STREETS.	Linear Feet Straight Edgestone.	Linear Feet Circle Edgestone.	Square Yards Brick Sidewalk.	Amount.
Wendell Street, Nos. 19–20			79	$61 88
Ware Street, from Harvard Street Northerly	138		103	259 33
Wallace Street, from No. 32 to Garden Street	357.5		232.5	577 65
Ellery Street, between Main and Harvard Streets	6.4		34	37 22
Lowell Street, between Brattle and Mt. Auburn Streets	432.7	11.2	333.5	713 93
Mill Street, between Holyoke and Plympton Streets	320			291 81
Oxford Street, Nos. 12–14			88	74 30
Hammond Street, from Oxford to Gorham Streets			334	296 32
Hammond Street from Oxford to Carver Streets	2,108	96		1,979 32
Harvard Street, between Trowbridge and Remington Streets	133		129	172 75
Ellery Street, from Cambridge Street to Rindge Field	235.8			256 58
Haskell Street, from North Avenue to Spruce Street	1,005.4	35.5		1,083 05
Linnæan Street	10			19 86
Holworthy Street, cor. Belmont Street	11	46.6		57 05
Broadway at standpipe	16			28 00
Amounts carried forward	4,773.8	189.3	1,333	$5,909 05

District No. 2. — *Concluded.*

STREETS.	Linear Feet Straight Edgestone.	Linear Feet Circle Edgestone.	Square Yards Brick Sidewalk.	Amount.
Amounts brought forward	4,773.8	189.3	1,333	$5,909 05
Concord Avenue at standpipe	20.5			32 25
Hurlbut Street, west side			303	270 87
Meacham Street, at Locke Street	25.5	19.3	25	47 60
Coolidge Avenue at Cambridge Cemetery	385	45		614 74
Spruce Street	43			39 60
Total District No. 2	5,247.8	253.6	1,661	$6,914 11
Total District No. 1	5,635.	57.9	5,691.5	12,621 25
Grand Total	10,882.8	311.5	7,352.5	$19,535 36

The natural increase in the demand for edgestones, brick sidewalks, and crossings renders it imperative that this work should be more liberally provided for. We have already in the files of the committee thirty-two petitions for brick sidewalks, edgestones, and crossings, all of which should be laid at once.

More work could be done in this branch of the Street Department, and a great deal of money saved, if, as stated elsewhere in this report, some provision could be immediately made for an adequate supply of paving gravel or sand.

Paving Western Avenue.

Appropriation		$10,390 00
EXPENDED.		
Labor	$2,902 29	
Teaming	721 12	
Paving blocks	5,694 30	
Edgestone	603 90	
Flagging stone	199 42	
Gravel	266 50	
		10,387 53
Balance		$2 47

The above amount has been expended, as shown, for paving Western Avenue on the south side, from Kinnaird Street to the bridge, amounting to 5,218 square yards. 1,351 feet of edgestones have been set, and new North River Flagging crossings laid at all the intersecting streets. It was the intention of the department at the beginning of the year to pave this entire street between the points named, and during the winter a sufficient number of paving blocks were purchased for that purpose and piled on the old Mill Pond property owned by the city. The Finance Committee failing to make provision for the work in the annual budget, it was begun under an order of the City Government which provided that the expense should be met by anticipated revenue from the sale of the old City Hall and other sources. Some question regarding the title to the property, arising in relation to the sale mentioned, it was not consummated, and the department was compelled to stop

work, the expense incurred being met by transfers from Street Department accounts.

This street should be finished the coming year, as should also Gore Street from Fifth Street to Bridge Street, and I shall recommend that provision be made for both when the budget is made up.

Main Street from the bridge line to Columbia Street is in an unsafe condition, and should be repaved during the coming year.

Owing to the character of the foundation for streets in that locality, to repave Main Street properly, the paving blocks should be relaid on a concrete foundation, the interstices to be filled with coarse gravel and tar.

Prison Point Street, one of the most heavily travelled in the city, is also in a dangerous condition, and should be repaved at once.

Mount Auburn Street (Widening).

Appropriation		$35,200 00
EXPENDED.		
Labor	$13,354 22	
Teaming	9,920 82	
Gravel	1,411 90	
Cracked stone	3,965 53	
Edgestone	4,802 25	
Field stone	1,581 73	
Tools, etc.	160 04	
		35,196 49
Balance		$3 51

The introduction of electric cars on this street this year necessitated its entire reconstruction, and the street has been entirely rebuilt from Brattle Square to the Watertown line. By an order of the City Government dated June 6, 1894, the street was widened from a point near Coolidge Avenue to its junction with Brattle Street, a distance of 885 feet, making the street not less than 66 feet wide at any point. Edgestones are now laid on both sides of the street its entire length, new flagging crossings have been laid at all the intersecting streets, catch basins have been built, and the street has been thoroughly macadamized to an average depth of over 18 inches.

Resurfacing Brattle and Craigie Streets.

Appropriation		$13,000 00
EXPENDED.		
Labor	$2,052 48	
Teaming	3,373 79	
Cracked stone	884 69	
Field stone	622 23	
Gravel	908 70	
		8,841 89
Balance		$4,158 11

The removal of the street railway tracks from these streets compelled the resurfacing of both their entire length, and an arrangement was entered into with the West End Street Railway Company whereby the city released the company from any further responsibility in the matter upon the payment of the amount above appropriated.

The work on Craigie Street has been completed, and Brattle Street has been resurfaced from its junction with Mt. Auburn Street at Fresh Pond Lane, to Mercer Circle, the crossings at intersecting streets being relaid between the points named.

The balance of the street has been made safe for the winter, and will be completed early in the spring. The unexpended balance from the appropriation will be sufficient to complete the work.

Street Watering.

Appropriation		$23,460 04
EXPENDED.		
Services of foreman	$966 75	
Sprinkling contracts	19,176 37	
New watering cart	425 00	
Repairs and alterations to carts	2,747 71	
Incidentals	134 45	
		23,450 28
Balance		$9 76

This amount has been expended for repairs of watering carts, incidental expenses, and the payment of contractors for sprinkling the streets.

About seventy miles of our streets have been watered every day this year when necessary, including Sundays, from April 1 to December 1, and a number of the thoroughfares were watered during the entire month of March. The present system of watering streets is unsatisfactory, and better results could be obtained if a radical change were made. If we should adopt the system of watering the streets and assessing a portion or the whole of the cost on the abutters, at a rate per foot of frontage on the street, which has been carried on so successfully in the city of Newton for the past two years, or of watering the streets and taking the entire cost from the tax levy, in either case the appropriation would be fixed, so that at the beginning of the year we could block out the city in sections and make contracts for watering them by the month or season, instead of by the hour, as we are doing at present.

This would enable us to begin watering all the streets at once and continue without change throughout the entire season, instead of being compelled, as we now are, to change the routes almost daily as the collections are brought in, causing dissatisfaction and complaint through almost all of the first three months of the watering season.

We are replacing as rapidly as possible the old-fashioned strainers on the watering carts with the latest patent sprinkling attachments, and shall soon have our entire street-watering plant in the best condition; and the changes suggested could, in my opinion, be made without materially increasing our present equipment. These recommendations will be brought to the attention of the Finance Committee when the budget is made up.

Widening Davenport Street.

Appropriation		$1,010 00
EXPENDED.		
Labor	$236 81	
Edgestone	307 57	
		534 38
Balance		$475 62

By an order approved September 5, Davenport Street was extended from its southwesterly terminus through to North Avenue.

MASSACHUSETTS AVENUE, AT HARVARD UNIVERSITY, CAMBRIDGE, MASS.

TRINIDAD LAKE ASPHALT PAVEMENT, LAID BY THE BARBER ASPHALT PAVING CO., JULY, 1894.

Owing to delays in removing obstructions, etc., we were unable to do anything to this street, except to set the edgestone and circles and lay a crossing at the entrance on North Avenue.

We intend early in the spring to thoroughly macadamize the street from North Avenue to Orchard Street, the unexpended balance being sufficient for that purpose.

Widening Harvard Street.

Appropriation		$17,000 00
EXPENDED.		
Labor	$1,801 83	
Contract for asphalting	13,110 00	
Moving fence	156 00	
Catch basins, tools, etc.	128 81	
		15,196 64
Balance		$1,803 36

Early in the summer of 1890 the late Mayor Gilmore sent a communication to the Committee on Roads and Bridges calling attention to the necessity of widening Harvard Street between Quincy Square and Dunster Street. Several conferences were had with the authorities of Harvard College during that and the three succeeding years, and finally an agreement was entered into between the city and the college, whereby the latter released to the city a strip of land along their property sufficient for the purpose, upon the condition that an asphalt pavement should be laid and forever maintained between the points named. Accordingly under an order approved December 26, 1893, the street was widened on the north side from eleven to thirteen feet, making the street not less than seventy feet wide. Twenty-two large trees were removed, the fence along the College Yard was set back to the new line, and the edgestones on both sides of the street were reset. A contract most favorable to the city was made with the Barber Asphalt Paving Company of Boston, for laying a "Trinidad Lake Asphalt Pavement" on the street, and it may be of interest to briefly describe the process of the work.

The street was excavated by this department to a subgrade

eight and one half inches below the wearing surface, and turned over to the contractors. Upon the roadbed thus prepared by the city was first laid a foundation of hydraulic cement-concrete of five inches thickness, composed of American Rosendale cement, broken stone, and clean sharp sand ; when this concrete foundation had thoroughly set, the second course, technically known as a "binder," was laid upon it. This course consisted of a fine bituminous concrete, composed of clean broken stone, not exceeding one and one-half inches in their largest dimensions, thoroughly screened, and asphaltic cement made from Trinidad Lake Asphalt. The stone was heated by passing through revolving heaters, thoroughly mixed with the asphaltic cement, and spread on the base or foundation with hot iron rakes, and immediately rammed and rolled with steam rollers while in a hot and plastic condition, until it attained a thickness of one and one-half inches.

The final wearing surface or pavement proper was then laid ; it is what is known as sheet asphalt, and is composed of asphaltic cement, sand, and pulverized carbonate of lime ; it was spread upon the base while heated to a temperature of about 250° Fahrenheit, and thoroughly compressed by steam rolling until no impression could be made on the surface.

The entire contract was performed in a highly satisfactory manner, and a great improvement has been made, as will be seen by reference to the cuts opposite pages 343 and 344.

The street was opened to travel on July 10, and under the contract the Asphalt Company guarantee it for five years from that date, making all repairs necessary due to the proper use of the street as a roadway.

The street railway tracks have been relaid in the new centre of the street, a new gas main pipe has been laid, all other pipes in the street have been tested, and there seems now to be no reason why the surface of the street should be disturbed during the period covered by the guarantee.

A highly desirable improvement has been accomplished, and it is hoped that this practical demonstration of the many desirable qualities of asphalt pavement will result in a more extended use of the same in our city. It is now generally conceded that

MASSACHUSETTS AVENUE (FORMERLY HARVARD ST.), CAMBRIDGE, MASS.

LAYING TRINIDAD LAKE ASPHALT ON CONCRETE BASE.

for streets not carrying the heaviest traffic, no pavement possesses so many qualities of excellence as this. Owing to the delay in moving the poles for electric wires, we were unable to complete the sidewalks this year; this work will be done immediately on the opening of next season, out of the unexpended balance left from the appropriation.

Widening Norton Street.

Appropriation		$1,740 00
EXPENDED.		
Labor	$848 29	
Bricks	333 01	
Edgestones	501 22	
Catch basins	27 30	
		1,709 82
Balance		$30 18

By an order approved April 25, Norton Street, from Bowdoin Street to Avon Street, a distance of 518 feet, was widened to a width of 35 feet, and the name of the street changed to Martin Street.

Seven trees, which by the widening were brought into the street, were removed, edgestones and brick sidewalks were set on both sides of the street, catch basins were built, and the street was graded its entire length.

In General.

Detailed and accurate accounts are kept of all work done on the streets, and information can be obtained at the office of the cost of construction, paving, or the repairs on any given street, and the number of openings made in it during the year.

All parties requiring permits to open or obstruct the streets are compelled to file bonds with competent sureties to protect the city from any damage which might arise from accidents occurring by reason of the granting and use of such permits. During the past year 1,438 permits have been granted, and we have on file bonds from the 176 parties to whom these permits were granted.

All the supplies of the department are purchased upon

requisitions from the office, and duplicate invoices are kept for reference. A record of each horse is kept, from the time of his purchase to his final disposal. All accidents coming under the observation of the employees of the department are reported to the office, where as full particulars as possible, including names of witnesses, etc., are kept on file.

The schedules of sidewalk assessments are reported from this office to the Board of Aldermen, and are levied on the abutters as soon as the work is completed. The daily reports of defects in streets and sidewalks from the police are promptly attended to by the foremen, and a return is made by them on blank forms of the time they receive the reports and complete the work.

Following is a schedule of the property in charge of this department: —

Real Estate.

City Stable, Hampshire Street:—		
72,661 sq. ft. of land, Assessors' valuation	$30,000 00	
Stables, sheds, and scales, including old police station	17,000 00	
		$47,000 00
Yard and Pound, east side of Norfolk Street, 39,600 sq. ft. of land, Assessors' valuation	12,000 00	
Mill Pond property, 305,690 sq. ft. of land, Assessors' valuation	46,000 00	
		58,000 00
Total real estate		$105,000 00

Personal Property.

47 horses	$11,900 00	
47 watering carts	15,525 00	
2 engines and stone-crushing plants	14,000 00	
2 steam road rollers	8,000 00	
4 horse rollers	1,000 00	
4 champion road machines	1,000 00	
2 Barnard Castle road scrapers	750 00	
5 street sweepers	1,490 00	
39 carts (27 single, 12 double)	5,600 00	
53 sets of harnesses	1,400 00	
24 sleds, 7 snow plows, 2 sleighs	2,500 00	
5 buggies and 3 wagons	600 00	
2 hay racks	225 00	
Amounts carried forward	$63,990 00	$105,000 00

Amounts brought forward	$63,990 00	$105,000 00
1 caravan	150 00	
2 pungs	50 00	
Tools and stable furniture	3,000 00	
481 feet straight edgestone	240 50	
430 feet circle edgestone	301 00	
16 feet North River flagging stone	10 08	
1,731 tons gutter stone	2,596 50	
50 cubic yards of paving gravel	50 00	
200,000 granite paving blocks	7,400 00	
30,000 granite paving blocks (seconds)	600 00	
35,000 paving bricks	455 00	
110 cubic yards cracked stone and dust	187 00	
		79 030 08
Total property in charge of the department		$184,030 08

In conclusion, I desire to acknowledge my indebtedness to His Honor the Mayor, for the constant, active interest he has taken in the department, and for his valuable advice and encouragement; to the members of the Joint and Standing Committees on Roads and Bridges, for their co-operation and assistance, and to the heads of the different departments for their uniform courtesy and consideration when dealing with matters affecting this department.

I wish also to express my appreciation of the prompt, intelligent, and efficient manner in which the work of the subordinate officials in the department has been done.

Respectfully submitted,

C. A. BROWN,

Superintendent of Streets.

REPORT OF THE COMMISSIONER ON HARVARD, WEST BOSTON, CRAIGIE'S, AND PRISON POINT BRIDGES.

To the Honorable, the City Council of the City of Cambridge: —

The Commissioner for Harvard, West Boston, Craigie's, and Prison Point Bridges submits for himself and associate the twenty-fourth annual report of the matters pertaining to West Boston and Cragie's Bridges, and eighteenth annual report on Prison Point Bridge, and the third annual report on Harvard Bridge.

Harvard Bridge.

The entire surface plank of the bridge has been renewed without interruption to travel. The West End Street Railway replanked between the rails on both tracks for the entire length of the bridge. The drawtender and his assistants keep the sidewalks free from snow, clean the globes on the electric lights, make all ordinary small repairs on the bridge, and assist in cleaning the roadway. Experience has shown that the roadway planking will have to be renewed as often as once a year. The asphalt sidewalks on the bridge have not given satisfaction, and will be renewed for the entire length of the bridge next year by the contractors. They were laid under a guarantee of maintenance for five years, and are to be left in good condition at the end of that time.

West Boston Bridge.

The under plank of the draw has been partly renewed, part of the water-way on side of the pier has been replanked, spur-shores and braces have been bolted and spiked to the piles to keep the bridge in line. The whole length of the bridge under the planking of the roadway has been examined and strengthened

where necessary. The bulkhead at the Boston end of the draw, which has been a source of trouble for some years, has been rebuilt. The work was done between 1 A. M. and 3 P. M., on Sunday, October 21, without interruption to travel.

The ordinary repairs, such as sheathing the draw, repairing fences, renewing plank on piers, paving, etc., have been attended to. Much of this work has been done by the drawtender and his assistants.

Craigie's Bridge.

The sides of the water-way for the passage of vessels through the bridge have been planked with three-inch spruce, and a bulkhead near the draw has been rebuilt. A weak point near the Cambridge end of the bridge has been strengthened, fences have been repaired, the draw sheathed, sidewalks repaired, and other ordinary repairs made, the men employed on the bridge helping. The flooring of the sidewalks near the Cambridge end and the bulkhead are in bad condition, and will be rebuilt next season.

Prison Point Bridge.

The house occupied by the drawtender has been painted inside and newly papered by the drawtender. Only ordinary repairs, such as planking and sheathing, have been made on the bridge. The draw is in bad condition, and needs a thorough repairing.

The question of abolishing the grade crossing on the Boston and Maine Railroad, which adjoins this bridge, is under discussion. If this should be accomplished by carrying the highway over the railroad, it would involve the rebuilding of the bridge. For this reason, only such repairs have been made as were absolutely necessary for safety.

In General.

The usual statement, of the number of draw openings, and the number of vessels which passed through, also the traffic over the bridges August 15 is appended.

The amount of revenue received for dockage of vessels, repairs on West End Street Railway tracks, rent, etc., during the year has been $1,195.62; one half, $597.81, has been paid to the City of Boston.

Respectfully submitted,

WILLIAM J. MARVIN,

Bridge Commissioner for Cambridge, and Harbor Master on Charles and Miller's Rivers and Broad Canal.

December 15, 1894.

Statement Showing Traffic on Bridges.

Date, 1894, Aug. 15.	Bridge.	Foot Passengers.	Teams.	Cars.	Car Passengers.	Bicycles.
6 A. M.	Craigie's.....	6,682	5,045	492	12,570	104
to	Harvard	2,115	2,771	346	9,109	1,350
7 P. M.	Prison Point.	2,200	1,867			65
	West Boston.	4,429	2,660	1,008	22,514	96
	Totals	15,426	12,343	1,846	44,193	1,615

Number of times the draws in Craigie's, Harvard, Prison Point, and West Boston Bridges have been opened, and the number of vessels which have passed through for the year ending November 30, 1894: —

DATE.	Craigie's.		Harvard.		Prison Point.		West Boston.	
December 1, 1893, to November 30, 1894.	Number of Draw Openings.	Number of Vessels Passed Through.	Number of Draw Openings.	Number of Vessels Passed Through.	Number of Draw Openings.	Number of Vessels Passed Through.	Number of Draw Openings.	Number of Vessels Passed Through.
December, 1893	189	229	73	108	42	73	102	186
January, 1894	73	95	10	13	19	26	41	63
February, "	90	119	40	41	14	22	29	44
March, "	48	73	94	105	24	31	63	121
April, "	256	305	139	182	21	26	172	255
May, "	353	459	209	285	42	53	189	308
June, "	320	401	179	226	36	47	208	310
July, "	387	407	319	375	51	70	218	313
August, "	330	411	210	248	32	39	207	318
September, "	367	423	424	475	19	20	220	323
October, "	375	443	415	456	31	45	239	336
November, "	317	388	379	450	34	46	202	301
Total	3,105	3,753	2,491	2,964	365	498	1,890	2,878

REPORT OF THE WATER BOARD.

To the Honorable, The City Council of the City of Cambridge:

GENTLEMEN, — The Cambridge Water Board herewith presents its thirtieth annual report for the year ending November 30th, 1894: —

This year completes the third decade since the City of Cambridge assumed the control of its water supply, and the past year has been one of the most important in the history of the Water Department.

With the beginning of last year, the Honorable Chester W. Kingsley, who for twenty-nine years so faithfully and ably served the City as a member of the Board, during which time he was for fourteen years its President, retired from this position. The City of Cambridge will long be under a debt of gratitude to him for the sagacity, zeal, and untiring attention which he gave to her interests in this important department.

The following resolutions were adopted by the Water Board: —

"The Cambridge Water Board in parting with the Honorable Chester W. Kingsley, after twenty-nine years of continuous service as a member of the Board, during which period he has been fourteen years President of the Board, desire to place upon record their appreciation of the fidelity, ability, and constancy with which he has discharged the many perplexing duties devolving upon him in this connection. What the value of those services has been will be appreciated more and more as the years go on.

"He has been most faithful to the City's interests, no political or partisan feeling having been allowed to sway him in his management of the affairs of the Board, and he will ever be an example to his associates and those who follow him.

"He will bear into private life our cordial best wishes, and our sincere regrets that we shall no longer have the pleasure of his presence as the head of our Board, while at the same time we are happy to feel that the City will be permitted to enjoy his wise counsels, and the value of his suggestions in the future development of the Water System of Cambridge."

A complimentary banquet, tendered by the citizens of Cambridge in Mr. Kingsley's honor, was given at the Revere House, Boston, January 17th, 1894, and was very largely attended by our representative citizens.

Early in the year it became evident to the Board that our Superintendent, the late Hiram Nevons, was suffering from an incurable malady, and although he attended to his work at intervals, and seemed determined not to relinquish his hold upon it, which for seventeen years he had so vigorously maintained, yet he was obliged at last to yield to his disease, and after several weeks of great suffering, he passed quietly away on May 17th, 1894.

He was a most efficient and faithful servant of the City, and a fitting testimonial of his work and character was presented to the Cambridge Club at its meeting in November, by Mr. Kingsley, whose long association with him enabled him to speak as few men could on this matter.

The following was adopted by the Board: —

In Water Board, June 19th, 1894.

"In the death of Hiram Nevons, who was for seventeen years Superintendent of the Cambridge Water Works, the City has lost a faithful and efficient official, and the Water Board an agreeable and satisfactory associate. His prompt and vigorous attention to duty at all times and under all circumstances, his capability and inflexible integrity, have been conspicuous and constant virtues, and his example has ever been in these respects a model which others may well copy.

"His influence had been quite as marked outside as inside our City, and the Water Works Association and other organizations had relied on his counsel and co-operation as wise, efficient, and aggressive.

"The Water Board desire to place upon their records their appreciation of his many virtues, and their sincere regret that his able and faithful services will be no more theirs to enjoy."

The Water Board was fortunate in having in their service as Assistant Superintendent a man who naturally became the successor of Mr. Nevons, — Mr. John L. Harrington, — and in the important and varied work committed to his care, he has proved himself to be very efficient and faithful, and as the months pass by will become still more valuable with added experience.

Our efficient Water Registrar has as usual looked after the interests of his department in a very satisfactory manner, while his cares and duties in this position are continually increasing, with no additional help except a typewriter.

Although the work of the Department has so greatly increased the last fifteen years, our clerical force has been increased by only two clerks, one of them being a stenographer and typewriter.

We think no other Department in the City can show such an increase of work and so little additional clerical force to attend to it. It has been necessary on this account to lengthen the hours of service, and the Water Board, at its meeting in November, recommended to the Finance Committee that the salary of the Registrar's Assistant be increased from $1000 to $1200 per annum, and the Superintendent's Assistant from $12 to $15 per week. We think these additions are fair and proper, and will be most worthily bestowed, and correspond with salaries in other Departments for less hours.

We annex a comparative statement of the Annual Office Expenses from 1880 to 1893 : —

Date.	Total Amount.	Date.	Total Amount.
1880	$4408.85	1887	$3322.45
1881	4250.23	1888	3731.12
1882	3927.74	1889	3827.69
1883	3970.10	1890	3880.95
1884	3716.32	1891	4013.50
1885	2871.07	1892	3920.69
1886	3451.40	1893	4272.43

This does not include rent paid the City.

Thus it will be seen that the office expenses of the Water Department are less than they were in 1880.

FINANCIAL CONDITION.

Total Cost of The Water Works.

Cost of the Works to November 30th, 1893, as per report of last year	$3,370,674.96
Expended during the past year	155,318.06
Making the total cost to November 30th, 1894 .	$3,525,993.02

Water Bond Account.

Whole amount of Water Bonds issued	$3,434,900.00
Amount paid from Sinking Fund	1,459,400.00
Leaving unpaid Water Bonds outstanding . .	$1,975,500.00
From this deduct the present value of the Water Debt Sinking Fund, per Trustees' account . .	612,084.75
Leaving Bonds to be paid from the Sinking Fund in the future	$1.363,415.25

$263,000.00 of the Water Bonds will mature within the next year and a half, — up to July 1st, 1896.

Payson Park Reservoir Account.

RECEIVED.

Appropriation by City Council	$250,000.00
Less amount transferred to other appropriations	94,700.00
Net appropriations	$155,300.00

EXPENDED.

In settlement for land taken, stripping land of loam, etc.	10,423.91
Unused balance of appropriation	$144,876.09

Hobbs Brook Reservoir Account.

RECEIVED.

Appropriation by City Council	$100,000.00
Transfer of premium received from sale of bonds to appropriation, by order of City Council . .	22,323.00
	$122,323.00

EXPENDED.

In settlement for estates taken, and expenses incident to the same	51,378.46
Unused balance of appropriation	$70,944.54

For further figures as to the financial operations of the department, we refer you to the Registrar's statement which accompanies this report.

Few of our citizens realize how much has been contributed by the Water Works Department to other Departments in our City, which without this assistance would have gone into the general tax levy to increase taxes.

Appended is a statement of several of these items which may be interesting to refer to.

1874. Filling and grading over sewer on Concord and Lake View Avenues	$17,073.91
1874. Building sewer in Lake View and Concord Avenues	14,680.97
1891. Rebuilding Concord Avenue from railroad crossing to Adams Street	12,400.00
1892. Widening and rebuilding Adams, Cushing, and Grove Streets, about	10,000.00
1893/4. Building Huron Street and straightening line of same (not including cost of land for street, taken and paid for by Water Works) .	14,200.00
1893. Bridge over Watertown Branch Railroad — Huron Street	7,485.00
Bridge over Holworthy Street — Huron Street	6,542.00
1894. Sanitaries (estimated)	1,200.00
	$83,581.88

In addition to using the surplus receipts from water rates as stated above, the City, for a number of years, swept into the Treasury at the close of each financial year, and used for general City purposes, the remaining surplus receipts from water rates. This was contrary to the law.

The attention of the City Council was called to the fact, and the matter was finally adjusted by the City giving to the Water Works Sinking Fund Commissioners its note for $200,000.00, bearing interest at the rate of four per cent per annum. As the Water Works Sinking Fund is increasing, it is improbable that the City will ever be called upon to pay this note, by inserting the amount in the general tax levy where it belongs.

The Water Department continues to pay three-fifths of the City Solicitor's salary, and $2000 per year rent for offices and basement room in City Hall.

Reduction of Water Rates.

The Water Board, over a year ago, prepared a revised schedule of water rates, which, upon careful consideration and conference with the Water Supply Committee, was presented to the City Council this year, and adopted, thus making a substantial reduction on the first faucet and water-closet, and affording material relief to the larger number of water-takers in our City. The total amount of reduction was about $23,000, and the relief comes largely to those who need it.

Our water rates to-day are lower than any other City in New England where water is pumped, and where there is no assessment made for Water Works in the general tax levy.

The Cambridge Water Works have always been self-sustaining, and have been able every year, in their thirty years' history, to put a larger amount into the Sinking Fund for redemption of Bonds than actually required by law. But it is fortunate for the City that this is so, since the high price of securities for several years, in which, by law, sinking funds can only be invested, has made it almost impossible to realize enough on these investments to take care of the bonds conveniently as they mature. And this year the amount paid into the Sinking Fund from water receipts is $19,382.54 in excess of legal requirements.

It is a very natural thought, when the annual statement of the Water Board appears, showing a considerable surplus of receipts over expenditures, that water rates should be reduced.

But had such suggestions been heeded by the City Council, as have been frequently given, our City Treasurer would have been somewhat perplexed as to how to take care of maturing bonds without presenting to the assessors a claim for $200,000 to pay the demand water loan already referred to.

The Water Board have occasion to thank the City Council that they have so constantly sustained the position of the Water Board as to reducing water rates.

We believe our citizens are, on the whole, satisfied with the present rates; and with the very large expenditures we see before us, and the large amount of water bonds maturing the next two years, there should be no further change of rates for the present.

Fresh Pond.

The work of filling on the northerly side of the Pond was prosecuted through last winter, acting under suggestions and requests from the Mayor, City Council, and Relief Committee, and employment was thus afforded to many of our citizens who otherwise would have been unemployed during a very trying winter.

The work was continued up to October 20th, when, owing to our appropriations being nearly exhausted, work was suspended.

The plans for improvement of the borders of the Pond are under the care of Messrs. Olmstead and Eliot, and as soon as they present them to us in the spring, work will be resumed. When these plans are completed, and the work done, our City will have one of the most attractive water parks in the country, and not one dollar of the cost thereof will have come from the general tax levy. The water receipts will take care of it all.

Seats and drinking fountains have been, during the year, placed at convenient intervals around the Pond, for the comfort of visitors.

The road around the Pond is now completed and in good order, although in some places it is yet to be widened, and where the old Fresh Pond Hotel grounds were, a retaining wall will be built.

The water in the Pond, owing to the small rainfall of the year, gradually disappeared, until, on September 20th, it reached a point only twenty inches above the top of our conduit or suction pipe. The Board feared it would be necessary to introduce again an auxiliary pump, and plans were all arranged to do this at a

few days' notice. For a month it seemed as if this were unavoidable, but the fall rains fortunately came at almost the very time when we had decided to put in the auxiliary pump, and gradually the Pond gained until, to-day, it is at grade 12.40, and steadily increasing, so that no more trouble is feared at present as to a short supply of water.

When the water was at its lowest stage in Fresh Pond, the coves on the easterly and southerly sides were cleaned of a vegetable growth that had accumulated, so that the Pond is now comparatively free of all deleterious matter. Huron Street has been completed and widened from the railroad bridge to the entrance of Fresh Pond drive on that street, at an expense of $3900, which has been paid by the Water Department.

The five unsettled claims for land taken on Woodlawn Avenue, and which threatened litigation, we are pleased to report are all satisfactorily settled, the last one having been paid a few days since.

The Board had been for some time endeavoring to secure the land bounded by the Fitchburg Railroad, Huron Street, and Fresh Pond Lane, to complete their takings around Fresh Pond, and give us control of whatever might prove a source of pollution. Failing to secure from Mr. Gray, one of the owners, a reasonable price, the land was taken August 3d, and a satisfactory settlement made with the Keene heirs. No settlement can be made with Mr. Gray that is reasonable in our judgment, and his case is likely to go to the courts.

The Board thought it best to examine the matter carefully as to whether the pumping station at Fresh Pond would be in the best position as to economy and utility when our new pump and the high service reservoir are completed.

The accompanying report from a committee appointed by us to consider this matter is a clear statement of the matter, confirming the present location of our pumping station.

October 13, 1894.

To the Honorable Water Board of the City of Cambridge:

Gentlemen, — The Committee appointed to consider whether any advantage could be gained by changing the location of the Cambridge pumping station (at present situated on Worthington Street) respectfully submits their report as follows: —

We have considered the subject under three heads, viz. —

1st. As respects economy of maintenance.

2d. Economy and advantages of construction in making the extension of the works as at present proposed.

3d. Improvement in the quality of the water as regards purity.

Under the first head your committee can see no prospective economy of maintenance, while they do see a decided objection in the great outlay that would be required for a new station, and in having a coal track through Fresh Pond Park to the same, if another location contiguous to the Pond were to be selected.

Secondly, no saving in cost of construction of the proposed extension of the works can be made by a removal of the pumping station, because two lines of pipe are necessary for security against accidents, and the length of these lines cannot be materially lessened by running them to and from another location.

Thirdly, as respects purity of the water supply.

We can see no advantage whatever by taking it from another part of the Pond. In fact, we consider the present location exceptionally good for obtaining the best water, the conduit entrance being fourteen feet below high water, and the depth of the water at the end of the forty-eight inch elbow-form, the intake of the conduit being twenty-six feet, thus giving twelve feet of solid water below the mouth of the elbow.

The present location is as good as it can be for the proper circulation of the water from Stony Brook, and the extension beyond the same; the depth of the conduit is as great as is desirable, all things considered, and it can be extended should the water at any time be found roily or dirty beyond the condition necessarily produced by heavy rains.

There is no record that the water has been unfavorably affected by the location of the intake up to the present time.

In conclusion, we may remark: —

That the Cambridge Pumping Station would have to remain substantially as at present located, and equipped, until a new station with all its accessories could be constructed, and we can see no advantage whatever to warrant the great expense that would be involved in making a change.

Respectfully submitted,

John L. Harrington,
Edwin C. Brooks,
E. D. Leavitt.

Worthington Street will probably be graded and extended to Larch Street the coming year.

The engineer's house has been completed the last year, and occupied. A third coat of paint should be applied, as recommended by the Superintendent.

In this connection we are pleased to mention the continued fidelity and ability of our efficient engineer, Edwin C. Brooks. His department continues to be managed to the entire satisfac tion of the Board.

Fishing in Fresh Pond.

It will, perhaps, be best before long to modify the City Ordinance which prohibits fishing in the Pond, so as to allow fishing under proper restrictions, as the number of fish is increasing rapidly in the Pond, attracting gulls, which, being garbage birds, seem to be more objectionable than our citizens would be, engaged in the same work of fishing in a different manner and with no injurious results to the Pond.

Cambridge Reservoir.

The reservoir and standpipe on Highland Street are in good condition. The standpipe has not been used for several months, as high service is better obtained by pumping against a closed gate than relying on the standpipe, and this plan will be continued probably until our high service reservoir at Payson Park is completed.

Pipe Line — Fresh Pond to Payson Park Reservoir.

The plan as presented by the City Engineer will make it necessary to make some settlement with several parties for a right of way from Cushing Street to School Street, a distance of about 1475 feet. It is expected that a satisfactory adjustment of this will be made, and if not, the Board recommend that land be taken according to City Engineer Hastings's plan.

The Trustees of Payson Park are ready to arrange a right of way from School Street through a private way, called Elm Street, belonging to them, for our pipe, and it is expected that an agreement satisfactory to both parties will soon be made.

Payson Park Reservoir.

A contract was made; on October 29th, 1894, with R. A. Malone, of Lancaster, Penn., for the construction of this reservoir.

Work was commenced in November, and will be resumed as soon as the frost is out of the ground next spring.

Satisfactory arrangements were made in the contract for the employment of Cambridge citizens and teams.

It is expected that this work will be completed the latter part of 1895.

The height of the water in Payson Park Reservoir will be one hundred and eighty feet, or one hundred feet above Stony Brook and four feet above Hobbs Brook. The height of our present standpipe is one hundred and thirty-seven feet, but the pressure is light for high service.

The Board gave very careful consideration to the question, whether it was advisable to bring the water directly from Hobbs Brook to Cambridge, and supply water direct from there by gravity.

After the most thorough investigation, and securing the best advice that we could get, the Board unanimously decided it was better to carry out the original plan, — to bring the water from Hobbs Brook to Stony Brook via the natural open aqueduct, thence, through a new line of forty-inch pipe to Fresh Pond, and thence, by pumping, to Payson Park Reservoir, from there by gravity; this would afford our City ample high service and greater pressure, sufficient for any structure likely to be erected and needing fire protection. Reference is made to this in Mr. Fteley's report.

New Pump.

Early in the year a contract was made with Mr. E. D. Leavitt for plans for the new 20,000,000-gallons pump and the incidentals thereto.

The City is fortunate in having as one of its citizens a gentleman so eminent in his profession as Mr. Leavitt is, and it is needless to say that any plans or work done under his supervision will be beyond criticism, while his personal interest as a citizen of Cambridge promises to produce results that will be alike gratifying to him and to our City.

Stony Brook.

Until this year, our right to the waters of Stony Brook Basin was limited to the overflow of the waste dam.

After several conferences last winter with the Waltham authorities and the Chairman of the Selectmen of Weston, it was mutually agreed that no objection would be raised to the proposition of Cambridge to apply to the Legislature for the right to draw water seven feet below the top of the waste dam. At the hearing before the Legislative Committee on Water Supply, no opposition was made; but when the favorable report of the Committee came to the Legislature for action, it was opposed by the representative of Weston in the Lower House, and of Waltham in the Upper House. Our able representatives, led by Representative Myers and Senator Durant, effectually disposed of the opposition, and the bill was passed early in the year. This gave to Cambridge a substantial relief in a year of unusual drought.

It was necessary, temporarily, to draw the water down still further to repair and paint the gate and change the screens, and permission was obtained from the Mayor of Waltham to do this.

The water is now above the legal limit, and will soon be likely to run to waste over the dam.

The advantage of a larger pipe connection with Fresh Pond can now be easily seen. The condition of the basin and surroundings is good, and a vigilant watch is kept over this important reservoir by Mr. Silas Baxter, our keeper at Stony Brook Basin.

The waste of the water that goes over the dam and into Charles River is almost incredible. It seems hardly possible that so small a stream as Stony Brook, with its tributaries, should discharge so large a volume of water. From careful measurements the records show that since Fresh Pond was connected with Stony Brook in November, 1887, to November, 1893, an annual average wastage of water has gone over the Stony Brook Dam of 6,300,000,000 gallons; this year it is about 3,000,000,000 gallons. It is difficult to realize what this means by the mere statement. But it means that enough water went to waste in six years to supply Cambridge with water, based on present rate of consumption, for eighteen years, and enough the last year, dry as it has been, to supply Cambridge for fifteen months. This is ample proof of the wisdom of the City Council in hold-

ing fast to our Stony Brook supply, rather than co-operating with Boston in her Metropolitan scheme. Cambridge has a supply of water ample for her wants for twenty to twenty-five years to come, and that is as much as Boston can be sure of in the contemplated Metropolitan supply from the Ware and Nashua Rivers.

The serious question with the Water Board has been how to best store and utilize this great waste of water from Stony Brook. Although this has been considered for two years, it was not until this year that definite action was taken.

Hobbs Brook Basin.

Early in the year, surveys were made of about 850 acres in Waltham, Lexington, and Lincoln bordering Hobbs Brook (the principal tributary of Stony Brook); and after these were completed, Col. George E. Waring, of Newport, an eminent water and sanitary expert, and Mr. A. Fteley, one of the most experienced and eminent hydraulic and mechanical engineers in this country, were invited to inspect the proposed storage basin, and report to the Water Board. Their reports are annexed, and will prove valuable as references, as well as confirmatory of the wisdom of the Board in selecting this site for a reservoir.

Mr. Fteley stated that the proposed basin was one of the best natural reservoirs he had seen in this country, and that there is no place on Stony Brook proper where a storage basin could be well built on account of the broad level of that valley, while Hobbs Brook Basin, hemmed in on either side with hills, and hence making a comparatively narrow valley, affords excellent opportunity to store water.

On the 29th of May, 1894, the Water Board voted to take the land according to the City Engineer's plan. This taking was confirmed by the City Council and approved by the Mayor, and was recorded June 26th, 1894.

The Water Board did not think it best to disturb the farmers in harvesting their crops for the year, and so notified them all by circular letter, dated June 27th, 1894, reading as follows: —

OFFICE OF THE CAMBRIDGE WATER BOARD,
CITY HALL.

CITY OF CAMBRIDGE, June 27, 1894.

The parties in the City of Waltham, and in the towns of Lexington and Lincoln, whose land has been taken by the City of Cambridge for the purpose of constructing a storage reservoir, are hereby notified that it is not the intention of the City of Cambridge to interfere with the harvesting of their crops for this season.

JAMES M. W. HALL,
President of Cambridge Water Board.

Some friction naturally resulted from this taking; and while the major part, in number and amount, for taking land and buildings have settled or agreed upon a basis of settlement, some are holding out hoping to get more than what we think should be paid.

The Board have endeavored to act liberally by all parties concerned, and by personal interviews as well as repeated conferences with our agents in this matter, Mr. E. P. Smith, of Waltham, and Mr. George Flint, of Lincoln, have tried to settle amicably and liberally. We hope to settle all these cases without litigation.

Several important questions have arisen with Waltham as to abandoning Brooks Street, which runs across the lower portion of our proposed basin, and deflecting Winter Street so as to follow the top of the proposed lower dam, and making Winter Street the boundary line of the southerly end of our basin.

To attend to this matter, and to hold conferences with the Waltham authorities frequently, Hon. Sherman Hoar was engaged, and has attended to the matter in a very satisfactory manner. The Waltham Board of Aldermen have agreed to the proposition made by the Cambridge Water Board, and approved by Mayor Bancroft, and this will be a benefit to both cities, and an amicable solution of what might have been a severe contest.

As a claim has been made by some of the Waltham authorities that Cambridge has no legal right to take water from Hobbs Brook, or build a basin there, the Board thought best — simply to avoid dispute, and not because they doubted for one moment the right of Cambridge, under the Acts of the Legislature, to erect this proposed basin, and any more basins or reservoirs whenever and wherever it seemed necessary, on Stony Brook or its tribu-

taries — to petition the Legislature to confirm all our acts in this matter. The City Council, acting under our suggestion, authorized the Mayor to petition accordingly. The petition has been prepared and published, and will be duly presented to the Legislature early in the session.

It is to be hoped that Waltham will not undertake to contest a right so plain that it is surprising the point has ever been raised.

Work was commenced at the basin in October, and, if the weather does not prove too unfavorable, will be prosecuted all winter, so as to give employment to as many of our citizens as apply for work there during the next three months. At present there are 115 men at work, which number will soon be increased. As soon as spring opens, as large a force as can be worked to advantage will be put on, and this work pushed as fast as possible.

The importance of having this storage reservoir completed without delay is fully realized by the Board.

We have found in all our plans a most valuable adviser in City Engineer Hastings, and Mr. Fteley cordially approved all his suggestions. The Board have retained as consulting engineer Mr. M. M. Tidd, whose experience in building storage basins and in matters of water supply makes him a valuable assistant.

The Superintendent has given special attention to discovering leaks this year, with results most satisfactory, as will be seen by the following comparative statement of the consumption of water.

Table showing the Increase of the Consumption of Water in the Last Eight Years.

	Gallons.	Average Daily Consumption.	Average Daily Increase.
Amount pumped in 1887	1,409,410,931	3,861,400	476,307
" " 1888	1,514,488,582	4,137,947	276,547
" " 1889	1,526,439,005	4,182,025	44,078
" " 1890	1,638,550,512	4,489,178	307,153
" " 1891	1,778,056,773	4,871,388	382,210
" " 1892	1,961,362,760	5,358,914	487,526
" " 1893	2,234,863,924	6,122,915	764,001
" " 1894	2,127,878,627	5,829,804	293,111 (decrease)

Comparative Rainfall and Height of Water in Fresh Pond Reservoir for the Past Eight Years.

Month.	Rainfall.								Water in the Reservoir Below High Water Mark, 16.85.							
	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.
December . .	5.23	4.22	6.67	3.36	4.40	6.78	1.23	5.23	10.37	8.55	0.91	1.10	0.58	1.63	2.70	4.01
January . . .	5.28	3.32	6.64	2.94	6.68	4.32	1.87	3.05	10.80	5.37	0.55	1.62	0.72	0.73	1.80	2.76
February . .	4.66	3.95	2.81	5.22	4.61	2.46	6.43	2.91	9.95	3.69	1.07	1.20	0.59	1.05	1.30	1.26
March . . .	4.46	5.55	3.29	7.02	5.74	3.56	2.50	0.84	9.52	1.72	1.03	1.06	0.32	1.27	0.20	0.51
April	3.94	2.60	3.73	4.83	2.72	0.77	3.25	2.94	9.04	1.14	0.88	0.32	0.30	0.98	0.06	0.18
May	1.79	6.36	5.65	6.09	2.44	6.06	7.30	4.63	9.30	0.81	0.87	0.67	0.31	0.50	0.18	0.04
June	1.86	3.25	3.41	3.51	4.01	4.23	2.18	0.81	10.20	1.13	0.62	1.01	1.05	0.48	0.17	0.29
July	4.19	2.87	8 53	2.77	3.06	2.53	2.26	2.88	11.61	2.39	1.28	2.32	2.15	1.87	0.09	1.22
August . . .	4.10	7.08	3.78	3.48	3.68	6.11	5.95	1.63	12.68	3.75	0.84	2.17	3.96	3.74	0.22	3.57
September . .	1.36	8.28	5.30	4.05	2.73	1.84	1.76	2.40	12.73	3.24	2.06	1.92	3.57	3.07	1.24	5.76
October . . .	3.22	4.83	3.73	9.31	5.10	2.15	3.77	5.19	12.66	1.37	2.81	2.06	2.51	3.42	4.00	5.69
November . .	3.90	7.70	6.51	1.28	3.08	4.04	1.99	3.34	12.05	1.25	1.75	0.94	2.27	3.96	4.77	4.77
Total . . .	43.99	60.01	60.08	53.80	48.25	44.85	40.49	35.85	Av. 10.91	Av. 2.86	Av. 1.22	Av. 1.30	Av. 1.53	Av. 1.89	Av. 1.39	Av. 2.50

Leakage and Waste.

To get the actual condition of the works as referring to general waste, the domestic consumption alone should be considered.

From the table showing the total and domestic consumption given in the Superintendent's report, it will be seen that the daily increase in the domestic consumption was 661,595 gallons, or $7\frac{2}{10}\%$; at the same time the population increased $3\frac{5}{10}\%$, a showing not equalled in the past ten years.

1187 leaks of different kinds have been stopped.

Reference to the diagram prepared by the Superintendent under the heading of "Leakage and Waste" shows an unusual, steady increase in the consumption since 1884, and the line representing the year 1894 shows a sudden drop; we hope to continue this excellent showing.

Comparative Water Supplied.

	Gallons.
Total quantity of water pumped in 1893 . . .	2,234,863,924
Total quantity of water pumped in 1894 . . .	2,127,878,627
	106,985,297

How the Water was used.

	Gallons.
Amount of water sold by meter	471,871,950
Amount used in watering streets, fountains, etc.	108,062,700
Amount used for domestic use, fires, etc. . . .	1,547,943,977
	2,127,878,627

Statement of Total Daily Consumption.

	Gallons.
Daily average pumping for high service . . .	555,568
Daily average pumping for low service through the reservoir	5,274,236
Showing average daily consumption, 1894 . .	5,829,804
Daily average consumption, 1893	6,122,915
Showing daily decrease during 1894	293,111

It is proposed to follow up the work of detecting leaks this year, and additional inspectors will be added to the force. While it is important to find ample sources of supply and utilize them, it is equally important to detect wastage, and put a prompt stop

to it. It is not, perhaps, stating it too strongly to say that a large proportion of the water used each day might just as well be saved from waste.

Renewal of Twenty-Inch Main in Cambridge Street.

During the past year nothing has been done toward renewing the twenty-inch main in Cambridge Street, although a small portion of it was included in our estimate for this year. The coming year, this work must be done preparatory to the new high service. The total length to be laid will be about 12,000 feet, taken together with the forty-inch that must be laid from the Engine House to Payson Park Reservoir, and from there to Harvard Square, will make about seven miles of pipe. This will be done in addition to our regular work.

It will be seen that the year 1895 promises to be the busiest year the department has ever known, with Payson Park Reservoir, Hobbs Brook Basin, the new pumping service, the extension of main pipe lines, improvement of Fresh Pond, together with our regular work; and we shall expect every department connected with the Water Works to exercise unusual diligence to see that the best results, with proper economy, are obtained.

Water Bonds.

The Water Board would call attention to one fact in connection with the issuance of Water Bonds, which they believe the City Council will duly note.

It is customary to issue Water Bonds without regard to the time when the Water Board will want the proceeds of the bonds, and without consultation with them. The Board suggest that hereafter no Water Bonds be issued until such time as the Water Board, at a regular meeting, shall recommend the same.

As an illustration of this matter, the Finance Committee appropriated $300,000 for construction for the annual appropriation for Water Works this year. The bonds for this amount were issued April 1st, 1894, but not for several months after did the Water Board want even a part of the amount, and a considerable portion of it will remain unexpended at the close of the year, while the Water Department is paying interest on bonds it does not need to use the proceeds of at present, and other depart-

ments are receiving the benefit, and will continue to until called for by the Water Board.

It seems to your Board that this is neither just nor proper and should not be continued.

In conclusion, the Board desire to thank the City Council for its prompt and respectful attention to our suggestions. This confidence has been one of the pleasant features of the management of the City interests through this department, and it will be our desire that nothing may occur to disturb these pleasant and harmonious relations.

Especially does the Board thank his Honor the Mayor for his ever-careful investigation and prompt attention to their requests.

The relations between the Water Board and the Executive are of a most friendly character, and the thorough attention which the Water Works Department has received from him makes it easy for us to settle many important matters in conference with him.

The Water Board have endeavored to zealously guard the interests committed to their trust. The gratuitous service they render the City is bestowed cheerfully and impartially, and the harmony and mutual respect which prevail is a sufficient promise that the future will be as carefully guarded as the past has been.

Respectfully submitted,

JAMES M. W. HALL,
GEORGE H. HOWARD,
STILLMAN F. KELLEY,
E. BURT PHILLIPS,
FRANK A. ALLEN.

City of Cambridge,
Office of the Cambridge Water Board,
City Hall, May 3d, 1894.

To the Honorable, The Water Board of Cambridge:

Gentlemen, — I beg to say, concerning the sanitary condition of the improved lands surrounding Fresh Pond, that I think you may safely conclude that malarial conditions may be avoided, so far as the relations of water and surface are concerned, by securing a depth of gravel filling above the level of soil water of not less

than eighteen inches, — the condition would not be made worse if the upper four or five inches of this eighteen were of ordinary surface soil, — and that the same immunity would be secured by a depth of four feet of muck loam, or clay above the water level; the reason for the difference being that gravel has very little capillary action and is filled with free air, while the capillarity of the closer soils is much greater and the aeration much less effective. I think you should keep these conditions in view in all of your improvements; and it may be found that it would be wise to raise the level of some of the present gravel filling. I suggest also that as the work goes on it would be well to keep a check on the effect of the load of filling on the elevation of finished surfaces which are underlaid by peat. You will have a good opportunity to study the effect of such loading in the filling work now being down.

Concerning the pond, of which I was shown a sketch with soundings, I would say, that I see no reason why it may not be improved by having its mud taken out, and by having the ground about it considerably elevated. To do this successfully, however, and with due regard to economy, it will be necessary to know first, just what the subterranean conditions are, to determine from these what will be the effect of the excavation, which may lead to a sinking of the border, and what the effect of loading the border, which would undoubtedly be quite marked, in the way of raising of the mud bottom of the pond.

I suggest that soundings to hard bottom, indicating depth of water and depth of mud, be taken at intervals of fifty feet all around the present edge of the pond. If, as is not unlikely, there is a peaty communication between the bottom of this pond and the swampy lands on the other side of the highway, soundings should be made from the pond across to the swamp at sufficiently frequent intervals to indicate the character and present condition of the peat underlying the filling. Soundings around the border may indicate the propriety of extending such explorations under the filling between the pond and Fresh Pond.

It will be important to conduct the work in such a manner as to prevent the forcing of the peat underlying the dry surface into the area of the pond. This may involve rather heavy sheet-piling for more or less of the periphery of the pond, and the excavation of the mud by dredging, without pumping out the water. These suggestions will indicate the course that I think your engineer should follow in formulating his plan for this work, and if further help is required from me after the soundings are taken, I shall be glad to render it.

Concerning the questions that came up in connection with the proposed reservoir in the valley of Hobbs Brook, I do not hesitate to say that I think the plan proposed by Mr. Hastings of converting Lincoln Avenue into a dam, corresponding in height with the Dam No. 1 at lower end of the reservoir, seems to me in every way commendable. The reservoir thus provided being as large as the water-shed can be depended on to fill, there is every reason for limiting it to the area that will be covered between these two dams. If the flow line were carried around, all the territory that would be reached by flooding to the height of Dam No. 1 would not increase the storage capacity at all in proportion to the area to be covered; the cost of the land to be covered would be considerable, and a large proportion of the flooded area would require much costly excavation to carry it down to a clean bottom. Mr. Hastings's proposal to pump the water from the water-shed above Lincoln Avenue into the new reservoir is a good and necessary complement of the Lincoln Avenue Dam scheme.

I suggest, however, that he reconsider carefully the project for carrying the flow from the large pond at the upper end of the valley to Lincoln Avenue through an iron pipe with such a head as to develop power for pumping the flow from the area between the pond and Lincoln Avenue. Judging from observation only, and without fixed data, it seems to me very doubtful that the power to be obtained in this way would be sufficient for the work. It would probably at least have to be supplemented by steam power.

This plan would also have the serious drawback that it would continue the very unfavorable conditions now existing in and above the pond, where a large area of water lies steeping a marsh bottom to the very decided injury of the quality of the water. I think it will be found that the cost of pumping the whole flow of this part of the water-shed, the present pond being used to hold back the water of heavy floods, as Mr. Hastings suggests, will not be at all onerous, and this scheme would have the increased advantage that the whole of the pond and its marshy bottom and extension can be thoroughly drained, and the stream confined to a narrow channel, in which it would be exposed in the least possible degree to the contaminating action of the peaty soil. After drainage, this soil would all be covered with vegetation, and a condition which is now a seriously objectionable one would be measurably removed.

I think that a further improvement of the character of the water to be derived from this gathering ground would be secured by following up all of the tributary water-courses and securing protection against all contaminating influences, whether from marshes

or as an incident to the present occupation of the territory. It will be rarely necessary to remove houses, barnyards, etc., provided proper, simple means are taken for purifying their foul drainage.

Respectfully submitted,

George E. Waring, Jr.

New York, May 21, 1894.

To the Cambridge Water Board:

Gentlemen, — In accordance with your request, I recently went to Cambridge to consult with you in regard to the proposed additional supply of water for your City, and on the 4th and 5th of the present month, with yourselves and your engineers, I visited the Water Works, and the water-sheds of Hobbs Brook and of Stony Brook.

The results of my examination, and of the subsequent study of the questions at issue, are submitted in the following report.

You are aware that I have consulted with your City Engineer, Mr. L. M. Hastings, and with Consulting Engineer M. M. Tidd, in Cambridge, and subsequently in my office, and the following remarks are based on the facts and the data furnished by them.

The reports of your City Engineer as to the present capabilities of your present water system, leave no doubt as to the necessity of providing as soon as practicable an additional supply. If we take into consideration the time needed for the construction of new works, and the probability that the consumption of water will continue to increase at the same rate, it is plain that the additional supply will be imperatively needed at the time of completion of the new works, if the year in which they are completed happens to be one of small rainfall.

Your instructions to me were that I examine the water-shed of Stony Brook, and report, whether, in my opinion, a storage reservoir, or reservoirs, can be established therein, of such value and of such capacity as would enable you to properly and successfully maintain the City's supply for the next twenty or twenty-five years. I am also to report my views as to the general manner of building and preparing the proposed reservoirs, and as to the best means of conveying the water to the City, in connection with the present works.

The upper part of the water-shed of Stony Brook proper, owing especially to the presence of the Fitchburg Railroad, is not

favorable for the establishment of a storage reservoir of large capacity, but more favorable opportunities are offered in the water-shed of Hobbs Brook, where two sites have been located by your engineer, the respective dams being indicated on the plans as Dams Nos. 1 and 2.

After viewing the grounds, and examining the results of the surveys made, I believe that it is best to build, at the present time, one large reservoir only, in connection with Dam No. 1. If, in the future, the capabilities of this reservoir had to be increased, additional supply could be procured by damming up Beaver Pond, and by diverting, in time of freshet, through a new channel the water flowing from the upper part of the water-shed of Stony Brook.

The reservoir formed by the erection of Dam No. 1 would not be deep, its extreme depth being twenty-two feet, and large excavations will be necessary to prepare it properly; but the general character of the ground is favorable.

Little need be said here of the construction of the dam; an earth embankment with a masonry core, and with the necessary masonry for the spillway and for the gate-house, such as is recommended by your engineer, is entirely sufficient, and will form a sound and reliable structure within reasonable limits of expenditure.

If sound rock can be found on one side of the valley, it would be advisable to utilize it for the spillway, especially if the profile of the ground and of the underlying rock is such as to admit of its being contiguous to the gate-house.

Your questions, when we were on the grounds examining the various parts of the proposed reservoir, bore especially on the probable quality of the water to be impounded, and on the method to be adopted for the preparation of the bottom and sides of the reservoir.

It is well known that water, when stored in large volume, and in a state of almost complete stagnation, is sometimes subject to certain kinds of deterioration, the origin of which is, to a large extent, obscure, and which are often detected by the senses of taste and smell.

These alterations in the quality of the water are favored by the presence therein of an excessive quantity of vegetable material; but although its influence cannot be denied, the fact remains that there are cases when the bad tastes and odor in stored water have been developed in reservoirs from which all vegetable material had been removed.

The influence of the soil and of the vegetable growths contained therein is greater where the depth is small, and where the bottom is more exposed to the influence of the sun and light, especially

when the water is to fluctuate up and down; it is consequently good practice to remove the soil and vegetable growths from all shallow places.

In the upper part of the reservoir, above Lincoln Street, the prevalence of shallow flowage is especially noticeable, and, inasmuch as at that point fluctuation would almost always occur, it is thought that it would be judicious to improve the natural condition of the entire area.

You know how several propositions for such improvement have been advanced; it has been suggested that the upper part of the reservoir could be separated from the lower by a dam at Lincoln Street, that the land above the dam might be left to cultivation, pumping being resorted to for lifting the natural flow of the brook over the dam into the basin below; the laying of a pipe has also been suggested to convey the water of the extreme upper section of the reservoir to the basin below the above-mentioned dam, thus reclaiming the intermediate part from the flowage. A filter dam has also been mentioned for the purpose of partly purifying the water from the upper part of the basin.

After examining these propositions with care, no doubt remains in my mind that the most, if not the only, judicious way of solving the question is to take the land necessary, and to flood it permanently by means of a dam built at Lincoln Street, all the territory above to be excavated to a depth of at least six (6) feet, and all the vegetable soil to be removed, and placed as described below.

As to the lower part of the reservoir, below Lincoln Street, while admitting that the removal of the vegetable soil from the entire area of the bottom and sides would probably make a slight difference at times, in favor of the quality of the water, I do not think that the results that might be obtained by such work would be commensurate with the very large expenditure that it would necessitate. My recommendation is that the vegetable soil be removed to a depth of ten or twelve feet below the crest of the dam, the material excavated to be placed on the sides, especially at such points where the flowage is the shallowest, thus forming new shores with regular slopes covered with clean gravel or stone paving.

The elevation of the present reservoir in Cambridge is much too low for the proper distribution of pressure throughout the City; and it is obvious that one of the first requirements for the additional water supply would consist in a marked improvement in the pressure at which the water would be furnished to the consumers.

The elevation of the water in the proposed Hobbs Brook Reservoir being 173.00 feet above high tide, the proposition has properly been made to regulate therefrom the City pressure.

On the other hand, the City has bought land (at Payson Park) for the purpose of a new distribution reservoir, also at a high elevation.

Two plans had consequently to be considered, both contingent on the construction of the storage reservoir on Hobbs Brook, and consisting of the general features enumerated below : —

1. *Hobbs Brook Plan :* — To lay a pipe direct from Hobbs Brook Dam to Harvard Square, to supply the City by gravity for a part of the year, and for the remaining months, to pump directly against the head in the storage reservoir, omitting the construction of a reservoir at Payson Park.

2. *The Payson Park Reservoir Plan :* — To construct a new distributing reservoir at Payson Park, to force the water into it continuously, and to lay a duplicate pipe from the reservoir on Stony Brook to Fresh Pond.

Both schemes have merits, and a close study of the advantages and disadvantages of each was necessary before reaching a conclusion which could be consistently recommended.

You are familiar with many of the questions connected with this problem, and that it is not thought necessary to enumerate here all the points which can be argued in favor of either plan, but I may state that the grounds on which my choice is especially based are :

1st. The best methods of securing an improved quality of water.

2d. The best pressure to be obtained.

3d. The present and ultimate cost of the two schemes.

The City of Cambridge has uncommon advantages for securing a good supply. Fresh Pond, which has stood the test of many years, has always furnished good water, and forms a valuable storage reservoir; its daily yield is comparatively small, but its large volume, and consequently large power of dilution, would furnish the means of selecting and mixing properly the waters from the different sources of supply for the consumption of the City.

On the ground of the quality of the supply, the Payson Park Reservoir plan is superior, because it admits at all times of such mixture of waters of the different sources as may be found judicious, while otherwise the water from Hobbs Brook would be furnished alone to the consumers for a part of the year, leaving the water of the reservoir on Stony Brook, and of Fresh Pond, stagnant; moreover the water from Hobbs Brook, if used in connection with the Payson Park Reservoir plan, would run for miles in the open air, from Dam No. 1 to the reservoir on Stony Brook, — a circumstance which would be beneficial to its quality.

A steady and high pressure is also desirable in many ways; a

higher pressure would probably postpone the establishment of a higher service, especially in case of the possible annexation of Belmont.

Owing to the distance of Hobbs Brook Reservoir from the City, the loss of head by friction, when working under the influence of gravity, would be very large, and the pressure in the City would be much inferior to that which could be obtained directly from Payson Park Reservoir.

On the grounds of cost, the Hobbs Brook plan would ultimately be the least expensive; but for the present it would cost more, because the duplicate pipe from Stony Brook to Fresh Pond need not be built for about five (5) years.

Your City Engineer estimates as follows the cost of the two rival schemes: —

	Standing of Acct. on completion.	Standing of Acct. in 1890.
Cost of Hobbs Brook Plan, including direct connection with Hobbs Brook Reservoir, and omitting the construction of the reservoir at Payson Park. Pumping intermittent	$1,392,000	$1,420,000
Cost of Payson Park Reservoir Plan. Pumping throughout the year.	1,215,000	1,608,000

This general estimate has been reviewed by me, and, although further surveys and a subsequent elaboration of the plans may show some minor differences, I am of opinion that the work can be built within the figures above-mentioned.

Notwithstanding the larger ultimate cost of the Payson Park Reservoir plan, I beg to state that, mainly for the reasons above given, I recommend the construction of what has been described herein as "The Payson Park Reservoir Plan," including the following features: —

1st. The construction of Hobbs Brook Reservoir in the manner indicated.

2d. The construction of the proposed reservoir at Payson Park.

3d. The laying of two pipes from Fresh Pond to the reservoir and from the reservoir into the City.

4th. The erection of a new pumping engine.

5th. The laying (after five years) of a duplicate pipe from Stony Brook to Fresh Pond.

A few additional words in regard to the schedule of work just given may not be out of place.

You are familiar with the site and with the proposed work at Payson Park. The site is favorable to the construction of a reser-

voir, and I agree with your engineer as to the methods of building. The expected capacity of the reservoir is to be 40,000,000 gallons, which, considering the great reserve that you have at Fresh Pond, is ample.

I have included, in the above schedule of work, two pipes: one from the pumps to the reservoir, the other from the reservoir to the City. It is not unusual in such cases to use one pipe instead of two, but two are preferable to secure uniformity in the pressure, and in the work of the pumping engines, and to maintain a constant circulation in the reservoir.

The question has been asked whether the choice between cast-iron and steel pipes is to be directed only by their respective cost, provided they are not to be connected with the house service. Steel pipes are equal, if not superior in case of high pressure, to cast-iron pipes; their success, however, depends more on the perfection of the coating used; pipes of this character have been used with success, but, owing to the doubt which may remain as to the value of the coatings now in use, owing also to the great care which must be observed in the application of these coatings to the pipes, I would, at equal cost, prefer the cast-iron pipes; if the steel pipes can be obtained on better terms, I would advise the use of them.

The diameter of the pipes which it is expected to use, not being far from the size at which there is doubt as to which of the steel or cast-iron pipes is the cheaper, it would be well to obtain alternate bids.

When examining the various merits and disadvantages of the two plans of work, I have taken the ground that the lower parts of Stony Brook, Hobbs Brook, and their affluents, which are exposed to contamination are to be protected from such pollution as could impair the purity of the water-supply.

If, owing to the lack of the necessary power, or to other causes, there were any reasons to fear that the purity of the streams cannot be maintained, it is obvious that a very potent argument would be added in favor of a pipe connection from Fresh Pond to Dam No. 1, which would carry directly into the City the unpolluted waters of the upper part of the water-shed of Hobbs Brook.

In conclusion, it is recommended that, before final action is taken on the important questions before you, you procure a chemical analysis of the waters of Hobbs Brook.

Respectfully submitted,

A. Fteley.

REPORT OF THE WATER REGISTRAR.

WATER REGISTRAR'S OFFICE,
CAMBRIDGE, December 10, 1894.

To the Cambridge Water Board:

GENTLEMEN, — In compliance with the requirements of the City Ordinance, I present the thirtieth annual report of the operations of this department, showing the receipts, expenditures, and abatements, together with a statement of the number of water-takers, etc., for the year ending Nov. 30, 1894.

Amount of bills remaining unpaid Nov. 30, 1893 :

Water rates	$847.80
Meter rates	1,115.60
Supplies and repairs	1,702.20
Off and on	70 00
Seals	6.75
Rent	624.69
Maintenance account	259.38
Construction account (general)	164.00

Amount of bills placed in hands of City Treasurer for collection, from Nov. 30, 1893 to Nov. 30, 1894 : —

Water rates	196,697.26	
Meter rates	59,688.26	
Supplies and repairs	5,971.29	
Off and on	438.00	
Seals	200.25	
Rent	543.96	
Maintenance account	1,004.74	
Construction account (general)	1,075.00	
Construction acc't (Payson Park Reservoir)	2902.20	
Total bills		$273,311.38

There have been collected : —

Water rates	$192,194.71	
Meter rates	59,831.66	
Off and on	410.00	
Seals	178.00	
Supplies and repairs	5,648.99	
Rents	527.96	
Maintenance account	967.89	
Construction account (general)	1,239.00	
Construction acc't (Payson Park Reservoir)	2,902 20	

There have been abated : —

Water rates	4,739.67	
Supplies and repairs	54.86	

There remain unpaid : —

Water rates	730.80	
Meter rates	873.08	
Supplies and repairs	1,969.64	
Off and on	84.00	
Seals	22.00	
Rent	640.69	
Maintenance account	296.23	
		$273,311.38

Expenditures.

Construction acc't (general)	$32,951.42	
" " (Fresh Pond Land)	28,489.89	
" " (Fresh Pond Reservoir)	65,632.06	
" " (Hobbs Brook Reservoir)	51,378.46	
" " (Payson Park Reservoir)	10,423.91	
" " (Public Sanitaries)	825.44	
" " (Stony Brook Reservoir)	442.32	
Maintenance account :		
General	26,638.19	
Office expenses	6,016.11	
Pumping	11,982.36	
Renewal of main pipe in Cambridge Street	6,215.78	
Stony Brook Reservoir	666.59	
Supply account	5,297.71	
		$246,960.24

Abatements.

Water rates bills to the amount of	$4,739.67
Supply and repair bills to the amount of	54.86
Total abatements	$4,794.53

Refunds.

Water rates to the amount of	$1,993.66	
Which amount deducted from the receipts	252,026.37	
Leaves net receipts for water	$250,032.71	
Add off and on, rents and seals, and maintenance account	2,083.85	
Makes net receipts of "rates, fines, etc."		$252,116.56

Off and On.

Water has been shut off for non-payment of rates or per order on account of vacancy, and seals have been applied to fixtures by request of owners or occupants as follows : —

Supplies shut off in 1894	525
Supplies let on, shut off in 1894	362
Supplies let on, shut off in previous years	54
New supplies let on	369
Seal locks applied to fixtures in 1894	908
Seal locks removed, put on in 1894	427
Seal locks removed, put on in previous years	415

Comparative Statement.

	1893.		1894.	
CONSTRUCTION ACCOUNT (PAYSON PARK RESERVOIR).				
Received.				
From bonds issued	$40,000.00	—	$155,300.00	
From sale of loam	—	—	2,902.20	
From premium on bonds . .	1,480.00			
		$41,480.00		$158,202.20
Expended.				
Settlement for land taken, etc.	$35,733.98	—	$10,423.91	
Balance of appropriation . .	5,746.02		147,778.29	
		$41,480.00		$158,202.20
CONSTRUCTION ACCOUNT (HOBBS BROOK RESERVOIR).				
Received.				
From bonds issued	—	—	$100,000.00	
From premium on $300,000.00 water bonds	—	—	22,323.00	
				$122,323.00
Expended.				
Settlement for estates taken, etc.	—	—	$51,378.46	
Balance of appropriation . .	—	—	70,944.54	
				$122,323.00
CONSTRUCTION ACCOUNT (FRESH POND LAND).				
Received.				
Balance of appropriation from preceding year	$34,604.74			
From bonds issued	45,000.00	—	$52,000.00	
From premium on bonds . .	1,255.00	—		
		$80,859.74		$52,000.00
Expended.				
Settlement for estates taken .	$61,038.37	—	$23,489.89	
Transferred to Construction account (general)	6,640.77			
Balance of appropriation . .	13,180.60	—	23,510.11	
		$80,859.74		$52,000.00
CONSTRUCTION ACCOUNT (STONY BROOK RESERVOIR).				
Received.				
From bonds issued	—	—	$1,861.43	
Balance of appropriation from 1893	$3,854.70			
		$3,854.70		$1,861.43
Expended.				
Settlement for estates taken, etc.	$1,993.27	—	$442.32	
Balance of appropriation . .	1,861.43		1,419.11	
		$3,854.70		$1,861.43

Comparative Statement *(continued)*.

	1893.		1894.	
CONSTRUCTION ACCOUNT (GENERAL).				
Received.				
From bonds issued	$65,000.00	—	$40,000.00	
From premium on bonds	1,965.00			
From sale of buildings at Fresh Pond	3,089.19	—	1,239.00	
From excess of receipts from "Rates, fines, etc."	60,000.00			
Transferred from Fresh Pond Land Account	6,640.77			
		$136,694.96		$41,239 00
Expended.				
Sundry bills	$136,694.96	—	$32.951.42	
Balance of appropriation	—	—	8,287.58	
		$136,694.96		$41,239.00
CONSTRUCTION ACCOUNT (FRESH POND RESERVOIR).				
Received.				
From bonds issued	—	—	$31,632.06	
From excess of receipts from "Rates, fines, etc."	—	—	34,000.00	
				$65,632.06
Expended.				
For filling and grading at and near Fresh Pond	—	—	—	$65,632.06
MAINTENANCE ACCOUNT.				
Received.				
Accrued interest on water bonds sold	$644.45	—	$816.67	
Sale of engine, boilers, hay, fruit, etc., at Fresh Pond	218.80	—	967.89	
From "Rates, fines, etc."	243,528.16	—	251,148.67	
		$244,391.41		$252,933.23
Expended.				
Care and repairs	$47,156.07	—	$51,519.03	
Interest on water debt	77,925.00	—	82,405.00	
Paid to Sinking Fund Commissioners	59,902.50	—	65,152.50	
Public sanitaries	—	—	825.44	
		$184,983.57		$199,901.97
Excess of receipts	—	$59,407.84	—	$53,031.26
SUPPLY ACCOUNT.				
Received	$6,169.64	—	$5,648.99	
Expended	5,122.86	—	5,297.71	
		$1,046.78		$351.28

Comparative Statement (*continued*).

1893.	Maintenance Account, excess of receipts . . .	$59,407.84	
	Supply Account, excess of receipts	1,046.78	
	Excess of total receipts over total expenditures	$60,454.62	
	Transferred to Construction Account (general) by order of the City Council	60,000.00	
	Balance due the Sinking Fund		$454.62
1894.	Maintenance Account, excess of receipts . . .	$53,031.26	
	Supply Account, excess of receipts	351.28	
	Excess of total receipts over total expenditures	$53,382.54	
	Transferred to Construction Account (Fresh Pond Reservoir)	34,000.00	
	Balance due the Sinking Fund		$19,382.54

Statement of the yearly revenue received from water rates since the purchase of the works by the City: —

From April 28, 1865,	to	Dec. 1, 1865	. . . . .		$32,367.19
" Dec. 1, 1865,	"	1, 1866	. . . . .		40,073.27
" " 1, 1866,	"	1, 1867	. . . . .		52,733.62
" " 1, 1867,	"	1, 1868	. . . . .		63,747.42
" " 1, 1868,	"	1, 1869	. . . . .		76,149.30
" " 1, 1869,	"	1, 1870	. . . . .		92,606.95
" " 1, 1870,	"	1, 1871	. . . . .		111,782.65
" " 1, 1871,	"	1, 1872	. . . . .		127,201.30
" " 1, 1872,	"	1, 1873	. . . . .		146,117.32
" " 1, 1873,	"	1, 1874	. . . . .		153,634.27
" " 1, 1874,	"	1, 1875	. . . . .		138,880.37
" " 1, 1875,	"	1, 1876	. . . . .		179,166.76
" " 1, 1876,	"	1, 1877	. . . . .		154,843.59
" " 1, 1877,	"	1, 1878	. . . . .		157,443.91
" " 1, 1878,	"	1, 1879	. . . . .		164,681.90
" " 1, 1879,	"	1, 1880	. . . . .		173,325.49
" " 1, 1880,	"	1, 1881	. . . . .		170,062.73
" " 1, 1881,	"	1, 1882	. . . . .		177,430 80
" " 1, 1882,	"	1, 1883	. . . . .		179,361.89
" " 1, 1883,	"	1, 1884	. . . . .		161,526.27
" " 1, 1884,	"	1, 1885	. . . . .		185,544.36
" " 1, 1885,	"	1, 1886	. . . . .		199,404.43
" " 1, 1886,	"	1, 1887	. . . . .		204,748.64
" " 1, 1887,	"	1, 1888	. . . . .		211,156.27
" " 1, 1888,	"	1, 1889	. . . . .		221,124.70
" " 1, 1889,	"	1, 1890	. . . . .		231,116.32
" " 1, 1890,	"	1, 1891	. . . . .		227,054.53
" " 1, 1891,	"	1, 1892	. . . . .		237,527.08
" " 1, 1892,	"	1, 1893	. . . . .		242,219.78
" " 1, 1893,	"	1, 1894	. . . . .		250,032.71

In addition to the manufactories, etc., supplied through meters, water is supplied to 13,171 families, 1,097 stables, with 3,174 horses and 318 cows, 359 shops, 702 offices and stores, by the following fixtures, *viz.* : —

22,875 faucets,	11 hopper-closets,
6,703 wash-basins,	93 urinals,
6,699 wash-tubs,	28 yard hydrants,
5,042 bath-tubs,	2 fountains,
578 slop-closets,	40 tumbler-washers,
15,655 pan-closets,	1,877 hand-hose,

6 motors.

Also,

834 fire-hydrants (besides 19 on private premises),
8 fire reservoirs,
23 drinking-fountains in public squares,
56 street-watering standpipes,
4 public sanitaries.

The above schedule of fixtures does not include those in school-houses, engine-houses, police-stations, and other City buildings.

The customary house-to-house inspection of the service pipes and fixtures on the premises has been made with the usual satisfactory results.

Respectfully submitted,

WALTER H. HARDING,
Registrar.

REPORT OF THE COMMITTEE ON ACCOUNTS OF THE CAMBRIDGE WATER BOARD.

We have examined the abstract of accounts presented by the Water Registrar, covering the records of the past year, and find that it corresponds with the statements submitted by the City Treasurer and Auditor, in every item, and includes the complete financial transactions of the Registrar's office. From this we compile the following summary : —

Total amount of uncollected bills in hands of the City Treasurer, Nov. 30, 1893, including water and meter rates, off and on water, seals, supplies and repairs, maintenance, construction, and rents	$4,790.42	
Total amount of bills delivered to the City Treasurer for collection during the year ending Nov. 30, 1894, including water and meter rates, off and on water, seals, supplies and repairs, maintenance, construction, and rents	268,520.96	
Total amount of bills for collection		$273,311.38
Net amount of collections by City Treasurer	268,694.94	
Total amount of uncollected bills in hands of City Treasurer, Nov. 30, 1894	4,616.44	
		273,311.38
Amount refunded by City Treasurer for abatement and refunds checks	$6,788.19	
Net amount of collections	261,906.75	
Gross collections as above	$268,694.94	

Frank A. Allen
Stillman F. Kelley
} *Committee on Accounts.*

Cambridge, Dec. 1, 1894.

CITY OF CAMBRIDGE,
OFFICE OF THE CITY TREASURER,
December 1, 1894.

To the Cambridge Water Board :

GENTLEMEN, — I give you herewith a record of the transactions between the Water Office and the City Treasurer's Office during the year ending November 30, 1894 : —

Gross collections for account of Water Works, rates, fines, etc. . . .	$257,882.00
Abatement certificates received and paid on "Water Rates" . . .	4,739.67
Gross collections for account of "Water Works Supply Account" . .	5,703.85
Abatement certificates received and paid on Supply Account . . .	54.86
"Refund Checks" have been presented and paid to the amount of . .	1,993.66
The uncollected bills in my hands, November 30, 1894, for account of "Maintenance" and "Water Rates" are	2,646.80
The uncollected bills in my hands, November 30, 1894, for account of "Supplies, Repairs, etc.," are	1,969.64
The gross collections on account of "Water Works, Maintenance," are	967.89
The gross collections on account of "Water Works, Construction, General Account," are	1,239.00
The gross collections on account of "Water Works Construction," Payson Park Reservoir, are	2.902.20

Very respectfully,

WILLIAM W. DALLINGER,
City Treasurer.

CAMBRIDGE, December 1, 1894.

I have examined the above statement and find the same correct.

HARRY T. UPHAM.
City Auditor.

ANNUAL STATEMENT OF THE WATER REGISTRAR TO THE COMMITTEE ON ACCOUNTS, DEC. 1, 1894.

Water rates unpaid, Nov. 30, 1893	$1,963.40	
Off and on rates unpaid, Nov. 30, 1893	70.00	
Rent unpaid, Nov. 30, 1893	624.69	
Seals unpaid, Nov. 30, 1893	6.75	
Maintenance Account unpaid, Nov. 30, 1893 . . .	259.38	
Construction Account unpaid, Nov. 30, 1893 . . .	164.00	
Amount carried forward		$3,088.22

Amount brought forward			$3,088.22
Bills placed in hands of City Treasurer for collection, from December 1, 1893, to December 1, 1894 : —			
Water Rates from Annual Ledgers	$184,098.00		
Water Rates from Fractional Ledgers	12,599.26		
Water Rates from Meter Ledgers	59,688.26		
Off and on water	438.00		
Rent	543.96		
Seals	200.25		
Maintenance Account	1,004.74		
Construction Account	3,977.20		
		262,549.67	
Total bills on " Rates, Fines, etc.," and Construction Acct.		$265,637.89	
Supply and repair bills unpaid, Nov. 30, 1893	$1,702.20		
Supply and repair bills placed in hands of the City Treasurer for collection, from Dec. 1, 1893, to Dec. 1, 1894	5,971.29		
		$7,673.49	
Total bills			$273,311.38
There have been collected : —			
Annual Ledgers	$183,566.25		
Fractional Ledgers	8,628.46		
Meter Ledgers	59,831.66		
Off and on	410.00		
Rent	527.96		
Seals	178.00		
Maintenance Account	967.89		
Construction Account	4,141.20		
Total collections on " Rates, Fines, etc.," and Construction Account		$258,251.42	
Collections on Supply and Repair Account		5,648.99	
Total collections		$263,900.41	
There have been abated, Water Rates	$4,739.67		
" " Supplies and Repairs	54.86		
There remain uncollected : —			
Water Rates	1,603.88		
Supplies and Repairs	1,969.64		
Off and on	84.00		
Seals	22.00		
Rent	640.69		
Maintenance Account	296.23		
		$9,410.97	
			$273,311.38
Total bills for collection		$273,311.38	
Less abated	$4,794.53		
Less refunded	1,993.66		
Less unpaid	4,616.44		
		$11,404.63	
Net receipts			$261.906.75

REPORT OF THE SUPERINTENDENT.

CAMBRIDGE, December 1, 1894.

To the President and Members of the Cambridge Water Works:

GENTLEMEN, — Complying with the City Ordinances, I herein submit the Thirtieth Annual Report of the Superintendent, for the year ending Nov. 30th, 1894, the same being my first Annual Report.

On May 27th Mr. Hiram Nevons, superintendent for the past seventeen years, died, and on July 6th the present incumbent was elected to the position made vacant.

Consumption.

The total quantity of water pumped during the year was 2,127,878,627 gallons.

High service	202,782,377 gallons
Low "	1,925,096,250 "

Daily average of water pumped during the year was 5,829,804 gallons.

High service	555,568 gallons
Low "	5,274,236 "

Decrease in total consumption, over last year	$4\frac{8}{10}\%$
Decrease in domestic " " " "	$7\frac{2}{10}\%$
Increase in population over last year	$3\frac{5}{10}\%$

It will be seen that the consumption for the past year has decreased; a fact not recorded before for the past ten years, and it is due to a special effort made to reduce the leakage and waste.

Quantity of water sold by meter	471,871,950 gallons
" " " used for sprinkling streets	83,929,900 "
" " " " " drinking fountains	22,815,000 "
" " " " " flushing sewers	1,109,800 "
" " " " " cleaning sanitaries	208,000 "
Total	579,934,650 gallons
Leaving for domestic purposes	1,547,943,977 "

Number of gallons daily for each inhabitant on total quantity pumped, 69.19 gallons.

Number of gallons daily for each inhabitant, on quantity pumped for domestic use, including water for private stables, hose, building and fire purposes, 50.34 gallons.

Comparative Statement of Total Pumping, during the past 5 Years.

Date.	Total Yearly Pumping.	Increase or Decrease.	Average Daily Pumping.	Increase or Decrease.	Gallons to each Inhabitant, daily.
1890	1,638,550,512	112,111,507, increase	4,489,178	307,155, increase	62.35
1891	1,778,056,775	139,506,263 "	4,871,388	382,210 "	60.18 *
1892	1,961,362,760	183,305,985 "	5,358,914	487,526 "	66.00
1893	2,234,863,924	273,501,164 "	6,122,915	764,001 "	74.50
1894	2,127,878,627	106,985,297, decrease	5,829,804	293,111, decrease	69.19

Comparative Statement of Domestic Pumping, during the past 5 Years.

Date.	Domestic Yearly Pumping.	Increase or Decrease.	Average Daily Pumping.	Increase or Decrease.	Gallons to each Inhabitant, daily.
1890	1,217,062,012	61,140,305, increase	3,334,416	167,507, increase	46.08
1891	1,270,360,425	53,298,413 "	3,480,439	146,023 "	42.96 †
1892	1,426,400,135	156,039,710 "	3,897,268	416,829 "	48.00
1893	1,668,235,574	241,835,439 "	4,570,509	673,241 "	55.61
1894	1,547,943,977	120,291,597, decrease	4,240,942	329,567, decrease	50.34

Total quantity of coal consumed	3,246,200	pounds
Daily average quantity of coal consumed . . .	8,994	"
Coal consumed per million gallons pumped . .	1,525.08	"

Highest level of water in Fresh Pond was on	June 1st, 17.15
Lowest " " " " " " " " "	Sept. 18, 10.64
Highest level of water in Stony Brook Reservoir was on .	Mar. 7th, 82.24
Lowest " " " " " " " " " .	Oct. 25th, 78.04
or 12 feet, 11½ inches below the top of the dam.	
Annual monthly average height of Fresh Pond	14.35
Total rainfall at Fresh Pond	35.85 inches
" " " Stony Brook Reservoir	35.66 "

* In place of 60.18, the past record should read 64.71.

† In place of 42.96, the past record should read 46.24.

Fresh Pond and Surroundings.

The quality of the water has continued to be excellent, though the quantity, during the latter part of the year was a matter of some anxiety.

The lowest level the water reached was on September 18th, when it stood one foot, seven and three-fourths inches, above the top of the draught conduit.

Plans were prepared, and arrangements made, looking toward placing an auxiliary pumping plant on the shore of the pond, in case it was needed. But rain fell in season, and all unusual expense was avoided.

Taking advantage of the low water, the rip-rapping about the pond has been evened up and repaired.

The driveway has been kept in good repair, and the grass along the border on either side has been cut from time to time as required.

All dead trees have been removed.

The work of filling in the low land was continued from last year. As the times were hard, the work was carried on through out the winter months, for the benefit of the unemployed.

In cold weather, work is often carried on at a loss, but in this case the lower wages paid, the height of the gravel bank, and the general good weather proving favorable, the cost of moving a cubic yard of gravel was about the same as during the warmer months of the year.

August 29th, the appropriation ran short, and work was stopped. Only what was absolutely necessary has since been done.

A total of 143,981 cubic yards of gravel has been dumped in the following places : —

32,450	cubic	yards	on	low	land	near	Lillie Pond.
17,500	"	"	"	"	"	"	Black's Nook.
94,031	"	"	"	"	"	in	Black's Crook.
Total 143,981	"	"					

118,350	cubic	yards	have	been	moved	by train.
25,631	"	"	"	"	"	" teams.

14,502 cubic yards of loam, stripped from the ground at Payson Park, have been deposited in several piles about the pond, preparatory to spreading it over the filled land when it is sufficiently settled to receive it.

Numerous slumps have occurred since the filling began ; one of considerable proportions happened on the night of June 21st.

We had been filling in at " Black's Crook " for several weeks, 700 cubic yards daily, and making but little visible headway. At 10 o'clock on the evening above referred to, a section of the dump, some three hundred feet long and about thirty feet wide, sunk seventeen feet, and the muddy bottom of the swamp bulged up, making quite an island one hundred feet away. Some idea of the size of the body of gravel which disappeared may be obtained when it is stated that the depth of mud in the centre of the island thrown up was thirty-five feet.

The grass has been cut as usual ; what was not needed by the department was sold standing.

A much needed watering-cart has been purchased. It is of the Studebaker pattern, and was made for the department with the tires of the wheels five inches wide. As the forward axle is nine and one half inches the shorter, a rolling surface of nineteen inches is given, which will prove of material advantage in packing and keeping the driveway in solid shape.

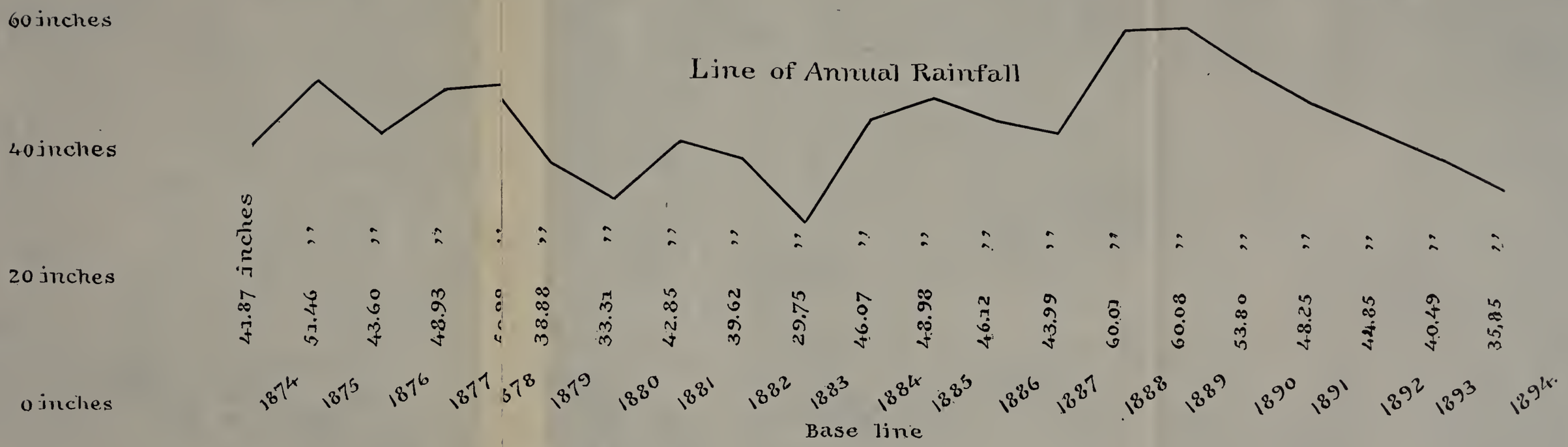
Three drinking-fountains have been placed on the driveway. Two of them are of the " Jenks " sidewalk pattern, and are located, one near Concord Avenue, the other near Holworthy Cut. The third fountain is on the westerly side of the pond opposite White's Bank. It is constructed of common field stones and covered by a rustic arbor. It is supplied with water through an iron pipe from a bed of springs on the hill beyond.

The ordinance against fishing in Fresh Pond has proved a wise measure of precaution in the past. The question is now raised, whether, under proper regulations, fishing might not be allowed with beneficial result to the water ?

A survey of the grounds about the pond has been made, and necessary soundings taken by French and Bryant, of Brookline.

The widening and grading of Huron Street has been completed to a point near the rustic driveway to Fresh Pond Park.

Diagram showing Annual line of rainfall at Fresh Pond for the past 20 years



Fresh Pond Reservoir.

	Lowest Point reached during Month.	Highest Point reached during Month.	Monthly Rainfall, Inches.	Intake Gate.	
				Opened full Capacity.	Closed.
December 1, 1893.	12.45			During entire month.	
" 31, "		13.29	5.23		
January 1, 1894.	13.35			During entire month.	
" 31, "		14.93	3.05		
February 1, "	14.96			During entire month.	
" 23, "		16.07	2.91		
March 1, "	15.95			During entire month.	
" 26, "		16.60	.84		
April 1, "	16.62				April 13.
" 13, "		16.86	2.94	April 17.	
May 18, "	16.63			During entire month.	
" 26, "		16.93	4.63		
June 1, "		17.14			June 1.
" 29, "	16.39		.81	June 6.	
July 1, "		16.39		July 14.	July 12.
" 31, "	14.31		2.88	July 31.	July 15.
August 1, "		14.27		August 14.	August 4.
" 31, "	12.05		1.63		August 16.
September 1, "		11.96		Sept. 18.	Sept. 24.
" 18, "	10.64		2.40	Sept. 27.	
October 2, "	10.78			During entire month.	
" 31, "		11.56	5.19		
November 1, "	11.63				Nov. 28.
" 28, "		12.51	3.34	Nov. 30.	
Total			35.85		

Pumping Station and Surroundings.

The roof and balustrade of the engine house are in bad repair, and will soon require attention.

As it will be necessary to make some change in the roof before the new Leavitt pump can be set up, it would be better to delay any repairs until this change is made.

The engineer's house, which was near completion at the date of the last report, has since been finished, and is now occupied. The contract called for but two coats of paint; a third coat should be

put on, and the house occupied by the assistant engineer should also be painted during the coming year.

A new fence has been built about the grounds and painted, giving a more finished appearance to the whole.

A macadam driveway has been constructed along the east and south sides of the pumping station, taking the place of the old gravel road, which required considerable attention.

The grade of the grass ground has been brought up to the grade of the surrounding streets.

Worthington Street, upon which fronts the pumping station, should be graded, and extended through to Larch Street as soon as the new forty-inch pumping main is laid in.

Reservoir.

The reservoir on Highland Street is in good repair. The banks and walks have received the usual attention.

Standpipe.

The standpipe is in good repair. It will need painting by another year.

Pipe-yard.

The buildings in the pipe-yard on Auburn Street are in good repair, but will need painting the coming year.

Shop in City Hall.

The shop contains a good supply of necessary tools and material. I recommend a new lathe be purchased and put in.

Pipe-bridges.

The pipe-bridge at Mt. Auburn Street Station is in good repair. The one at Porter's Station has given us some trouble during the past year, and will soon need special attention. The pipe-bridge across Charles River at Brookline Street is in good repair, with the exception of the house over the pipe, which remains in about the same condition as it was at the date of the last report. In place of making any repairs now, I recommend the house be removed, and, under present conditions, the pipe left without any covering.

High Service.

232 feet of 6-inch pipe has been laid in Massachusetts Avenue from Bigelow Street, east, to supply Hotel "Alma," and the building of the Cambridge Mutual Fire Insurance Co., corner Inman Street.

625 feet of 10-inch pipe has been laid in Appleton Street, in place of the same length of old 12-inch pipe, abandoned, which ran across private grounds from Highland Street to Brattle Street.

Early in the season, complaint was made by the water-takers on the east end of the high service, that the pressure was insufficient. Investigation showed this to be the case; a gate was set on Reservoir Street near the standpipe, and a relief valve set on the pumping main, in the engine house; the pumps were worked against the gate, and the pressure raised 8 pounds per square inch.

This has proved satisfactory, and no complaint has since been made.

Leakage and Waste.

Early in the year, the shortage of supply in 1893 was considered, and, bearing in mind the probability of a similar result this year, special effort was made to reduce the consumption to the lowest point and provide for all necessary purposes.

The result has been exceptionally good. A daily reduction of 329,567 gallons has been made in the domestic consumption over the previous year, which, added to 545,034 gallons, the estimated increase for this year (had the consumption been allowed to continue at the average rate it has during the past two years), and we have a total daily saving of 874,601 gallons.

During the months of August and September, the hours for use of hose were reduced from four to one a day. About the first of August, the public was notified of a shortage in the supply. These notifications tended to reduce the consumption, just how much cannot be exactly determined, but a liberal allowance will be made.

Table showing a Gain or Loss in Total Consumption for the Year 1894 over 1893.

Date.	Total Consumption, 1893.	Total Consumption, 1894.	Increase or Decrease. + or —
December, 1893 .	166,479,220	188,418,350	+ 21,939,130
January, 1894 .	221,379,825	185,716,360	— 35,663,465
February " .	192,270,975	173,946,620	— 18,324,355
March " .	187,542,890	169,404,760	— 18,138,130
April " .	166,964,004	161,559,235	— 5,404,769
May " .	182,804,980	182,975,952	+ 170,972
June " .	193,296,200	197,204,015	+ 3,907,815
July " .	209,209,175	205,709,330	— 3,499,845
August " .	189,942,100	179,500,505	— 10,441,595
September " .	179,729,880	167,571,040	— 12,158,840
October " .	183,917,075	163,760,190	— 20,156,885
November " .	161,327,600	152,112,270	— 9,215,330
Total	2,234,863,924	2,127,878,627	— 106,985,297

It will be seen by reference to the above table, that a total saving of 51,972,650 gallons was made during the four months, August, September, October, November, or 12,993,150 gallons each month over 1893; allowing one-half of this quantity as the amount saved by reducing the hours for use of hose, etc., and we have a saving from other sources of 6,496,575 gallons a month; a quantity not excessive when compared with the saving of most of the other months of the year.

Reducing the quantity allowed for reduction of hours for use of hose from months to days, we have 213,005 gallons; deducting it from 874,601 gallons, we have left a total daily saving in last year's consumption of 661,596 gallons.

1,187 leaks have been stopped; namely, 4 on 3-inch mains, 4 on 4-inch mains, 2 on 6-inch mains, 2 on 8-inch mains, 2 on 12-inch mains, 1 on 30-inch mains, 117 on supplies in the street. 1,047 on the premises, 3 on street-watering standpipes, 2 on gates, 2 in

Diagram showing the relation between Total Daily and Domestic Daily Consumption and Annual Population during the past Twenty-three years.

Total Consumption

Domestic Consumption

Population (Including Somerville takers)

	Population	Total Consumption	Domestic Consumption
1872	45,166.	1,626,006. Gallons	
1873	46,807	2,027,812. Gallons	
1874	48,448.	2,299,455. Gallons	
1875	50,088.	2,718,485. "	
1876	51,061.	2,438,564. "	
1877	52,033.	2,631,732. "	
1878	53,002.	2,257,190. "	
1879	53,977.	2,432,386. "	
1880	55,210.	2,423,198. "	
1881		1,957,429. "	
1882	57,830.		
1883	59,190.	2,474,616. "	1,834,900. "
1884	60,550.	2,686,768. "	1,982,400. "
1885	61,910.	2,626,691. "	1,916,270. "
1886	63,982.	3,082,884. "	2,318,609. "
1887	66,056.	3,385,093. "	2,516,490. "
1888	68,130.	3,861,400. "	2,868,121. "
1889	70,204.	4,237,947. "	3,117,135 "
1890	72,278.	4,182,025. "	3,164,170. "
1891	75,271.	4,489,179. "	3,334,412 "
1892	78,264.	4,873,388. "	3,480,440
1893	81,257.	5,358,915. "	3,897,340 "
1894	84,250.	6,122,915. "	4,570,300. "
		5,829,804. "	4,240,942. "

meters, 1 on blow-off cock, — of these 1,040 were found by inspectors, and were repaired by the owner or occupant.

The following diagram shows that the lines of total and domestic consumption follow each other very nearly parallel; and the line of population indicates the consumption should be lower than it has been during the past few years.

Several leaks of importance have been discovered and repaired. One, a 4-inch pipe in Eighth Street as it crosses Cambridge Street, was found broken crosswise over the sewer into which it was discharging. The ends of the pipe were about $\frac{1}{16}$ of an inch apart, and 50,000 gallons to 60,000 gallons, daily, were easily lost.

That the consumption may be further controlled, the placing of meters on all public buildings might be considered.

Main Pipe.

Main pipes have been laid in the following streets: 239 feet of 6-inch in Appian Way; 625 feet of 10-inch in Appleton Street; 691 feet of 6-inch in Ash Street (renewal); 6 feet of 6-inch in Avon Street; 189 feet of 6-inch in Avon Hill Street; 71 feet of 4-inch in Beach Avenue; 22 feet of 4-inch in Bell Court; 48 feet of 8-inch in Bent Street; 1,357 feet of 8-inch in Binney Street (891 feet renewal); 2 feet of 6-inch in Blackstone Street; 9 feet of 6-inch and 512 feet of 12-inch in Bond Street (renewal); 865 feet of 6-inch in Bowdoin Street (renewal); 41½ feet of 6-inch in Brattle Street; 10½ feet of 4-inch in Bristol Street; 107 feet of 6-inch in Brookford Street; 12 feet of 8-inch in Brookline Street; 415 feet of 12-inch in Cambridge Street (renewal); 6 feet of 12-inch, 244 feet of 6-inch, and 2 feet of 4-inch in Channing Street; 294 feet of 6-inch in Charles Street; 204½ feet of 6-inch in Clifton Street; 225 feet of 6-inch in Davenport Street; 658 feet of 6-inch in Distillhouse Street (renewal); 500 feet of 6-inch in Eighth Street (renewal); 104 feet of 4-inch in Farrar Street; 2,150 feet of 12-inch in First Street (renewal); 448½ feet of 6-inch in Foster Street; 100 feet of 4-inch in Frank Street; 28 feet of 6-inch in Franklin Street; 575 feet of 4-inch, 346 feet of 2-inch, and 146 feet of 1-inch in Fresh Pond Drive; 271 feet of 12-inch and 136 of 6-inch in Garden Street (renewal); 273 feet of 6-inch in Gibson Street; 360 feet of 6-inch in Green Street; 569 feet of 6-inch and 4 feet of 4-inch in Hancock Street (renewal); 230 feet of 6-inch and 3 feet of 1½-inch in Highland Avenue; 863 feet

of 6-inch in Howard Street (renewal); 108 feet of 6-inch in Hovey Avenue; 148½ feet of 6-inch in Hudson Street (renewal); 35 feet of 4-inch in Irving Place; 6 feet of 6-inch in Jay Street; 320 feet of 4-inch and 3 feet of 1½-inch in Kennedy Avenue; 231 feet of 4-inch and 3 feet of 1½-inch in Kenway Street; 38 feet of 6-inch in Kinnaird Street; 171 feet of 4-inch in Lamont Street; 94 feet of 6-inch in Lee Street; 1,785 feet of 10-inch and 8 feet of 6-inch in Linnæan Street (renewal); 242 feet of 6-inch and 437 feet of 4-inch in Massachusetts Avenue; 342 feet of 4-inch and 3 feet of 1½-inch in Miller Avenue; 24 feet of 6-inch in Munroe Street; 1,553 feet of 6-inch in Norfolk Street (renewal); 99½-feet of 4-inch in Oak Street Place; 38 feet of 6-inch in Otis Street; 868 feet of 6-inch in Prescott Street (renewal); 150 feet of 6-inch in Regent Street; 12 feet of 6-inch in Sacramento Street; 177 feet of 4-inch in Sargent Street Place; 462½ feet of 6-inch and 3 feet of 1½-inch in Second Street; 548 feet of 12-inch (renewal) and 15 feet of 8-inch in Sidney Street; 186 feet of 6-inch in South Street, Somerville; 38 feet of 6-inch in Soden Street, corner Western Avenue; 159 feet of 4-inch and 3 feet of 1½-inch in Stiles Street; 20 feet of 8-inch in Thorndike Street; 710 feet of 6-inch in Trowbridge Street (renewal); 514 feet of 6-inch in Valentine Street (renewal); 696½ feet of 4-inch and 5 feet of 1½-inch in Vassal Lane; 392 feet of 6-inch in Vincent Street; 268 feet of 6-inch in Vine Street (renewal); 1,802 feet of 8-inch and 211 feet of 6-inch in Washington Street (renewal); 45 feet of 6-inch in Washburne Avenue; 175 feet of 4-inch in Washburne Court; 900 feet of 8-inch and 14 feet of 6-inch in Western Avenue (renewal); 1,128½ feet of 6-inch in West Lambert Avenue; and 5 feet of 6-inch in Willow Street.

For the accommodation of the sewer department, the 6-inch main pipe in Binney Street was removed, and as this had been removed, and was too small, a new 8-inch main was laid in a new location.

Total length of cast-iron pipes laid during the year 1894 is 28,749½ feet, equal to 5.45 miles, — the weight of the metal being 570.66 tons.

The different sizes of pipes laid, their lengths and weights are as follows: —

Size.	Length in feet.	Weight in tons.
12 inches	3,902	149.81
10 "	2,410	83.91
8 "	4,156	90.91
6 "	14,555	214.42
4 "	3,726½	31.61

I recommend the old 20-inch cement pipe, now in Cambridge Street, be replaced with a new line, from First Street to Massachusetts Avenue, with sizes as follows: 12-inch from First Street to Third Street; 20-inch from Third Street to Ninth Street; 24-inch from Ninth Street to Massachusetts Avenue. To lay this line we have on hand a sufficient quantity of 20-inch pipe.

Other recommendations, having reference to the general distribution, will be made later in a special report.

New Supplies.

Four hundred and thirteen new supplies have been laid, making the total number laid to date twelve thousand one hundred and eighty-two.

Eighty supplies have been renewed, — of these, sixteen have been enlarged; twenty-two have been furnished with sidewalk shut-offs; four have been extended.

Supplies in the following streets have been connected to the new mains: Ash, Bond, Bowdoin, Cambridge, Distillhouse, Eighth, First, Garden, Hancock, Howard, Hudson, Linnæan, Norfolk, Prescott, Sidney, Trowbridge, Valentine, Vine, Washington, and Western Avenue.

In the following streets, the service boxes on the supplies have been raised: Blanche Street, Coolidge Avenue, Dinsmore Court, Mt. Auburn and Norton Streets, Saginaw Avenue, and Thorndike Street.

The supplies in Harvard Street, near Harvard Square, have been offset for the accommodation of the new gas main.

Drinking Fountains.

Two new sidewalk drinking-fountains of Jenks make, and one built of field stone with a rustic cover, have been located at Fresh Pond Park.

In the City proper no additions have been made.

There are twenty-three now in use.

Street-Watering Standpipes.

No new street-watering standpipes have been located during the year.

The standpipes in Mt. Auburn Street have been raised on account of the new grade of street; those at the corners of Mt. Auburn Street and Coolidge Avenue, and Concord Avenue and Wyeth Street, have been set back to accommodate new lines of the streets.

From the corner of Dana and Chatham Streets, the standpipe has been removed and set on Broadway at the corner of Dana Street. By this change the standpipe has been transferred from the high to the low service system.

The standpipe on Prison Point Street, opposite the round house, broken by a team, has been replaced by a new one.

Gates.

The gates have been inspected and are in good condition.

New 4-inch gates have been set in place of old 4-inch, removed, at corners of Fayette and Cambridge Streets, Kinnaird and Jay Streets, Garden Street, Seventh and Cambridge Streets (broken), and Madison Street and Concord Avenue; a new 6-inch at the corner of Pearl Street and Massachusetts Avenue, in place of old gate, removed; a new 12-inch at the corner of Broadway and Inman Street, in place of old gate, removed.

At the corner of Linden and Harvard Streets the 4-inch gate has been abandoned, it being under the West End Street Railway Company's tracks; a new gate has been located on Linden Street.

In Western Avenue, the location of the Cambridge Electric Light Company's gate has been changed.

Boxes.

Sixteen hydrant, thirty-five iron, and thirty-two wooden boxes, making a total of eighty-three, have been set in place of worthless ones removed.

On account of changes in the grades of the streets, the boxes in Albany and Mt. Auburn Streets, have been raised and those in Binney and Blackstone Streets and Wells Place have been lowered.

Check-Valves.

The 6-inch check-valve at corner of Ellery and Harvard Streets (south) has been moved farther south on Ellery Street, thus extending the high service in order to more adequately supply the houses on the hill.

The 4-inch check-valve in Madison Street has been changed to Concord Avenue, corner Madison Street; this street now is on the low service.

Meters.

The number of meters now in use is 310.

Sanitaries.

Along the middle of the year the City Council directed the Water Board to purchase and set up four sanitaries in the following locations, and appropriated $1200.00 for doing the work; one in Lechmere Square, one in Kendall Square, one in Central Square, and one in Brattle Square.

The one in Central Square was purchased by this department a year ago, and is of cast-iron. The other three were made by George T. McLauthlin and Company, of Boston; they are of wrought-iron and after the style of the small-sized Boston sanitaries.

Hydrants.

Forty-seven new hydrants have been set during the year.

Old flush hydrants have been removed as follows: corners Avon and Linnæan Streets, Columbia and Washington Streets, Franklin and Sidney Streets, Washington and Clark Streets, Washington and Moore Streets, Garden Street opposite Bond Street, Brattle and Ash Streets, Broadway and Trowbridge Street, Prescott Street and Broadway, Hancock and Harvard

Streets, Hancock Street and Broadway, Massachusetts Avenue and Hancock Street, Wyeth Street, and corner Washington and Windsor Streets.

The old Boston hydrant at the corner of Boylston and Eliot Streets has been replaced by a new Boston.

On account of the changes in the lines and grades of streets, the hydrants in the following streets have been raised and relocated: Binney, Irving, and Mt. Auburn Streets and Ellsworth Avenue.

On Harvard Street, near Harvard Square, the hydrants have been moved back on account of the widening of the street.

The hydrant on First Street between Spring and Thorndike Streets has been moved to the corner of First and Spring Streets.

The following hydrants are located on private premises.

Location.	Flush.	Post.
American Rubber Company		3
Boston & Maine Railroad Company	4	3
Boston Woven Hose Company		1
Houghton & Company	2	2
Maverick Oil Works		1
Mount Auburn Corporation	1	0
North & Company		1
Page, George G., & Company		1
Street Department, Brewer Street		1
Street Department, Tremont Street		1
West End Street Railway Company		1

Stony Brook and Surroundings.

No work of any importance has been done at Stony Brook the past year. The water was drawn nearly 13 feet below the top of the dam, and the screens and gate-rods have been repaired and painted.

The buildings are all in good repair, and the grounds have received the usual attention.

The fences about the reservoir will require painting the coming season.

On Sunday, August 12th, Mr. Silas Baxter, keeper of the dam, discovered in the water (in a shady nook near the old location of Sibley's Mill in the town of Weston) the body of a man, drowned.

The body had been in the water but a few hours, and was at once removed, and taken to Waltham.

Mr. Baxter has always taken unusual pains to see that the water in the reservoir is kept free from all kinds of pollution.

I recommend the purchase of a new boat to take the place of the old one, well worn out.

Table showing the daily average number of gallons by the month flowing over the waste way.

December,	1893,	8,950,000 gals.	4 days.	June,	1894,	9,977,778 gals.	9 days.
January,	1894,	5,338,709 "		July,	"	No overflow.	
February,	"	13,392,857 "		August,	"	"	"
March,	"	37,987,096 "		September,	"	"	"
April,	"	26,870,000 "		October,	"	"	"
May,	"	6,522,580 "		November,	"	"	"

Total quantity wasted . . . 2,853,000,000 gallons.

Stony Brook Pipe Line.

This line of pipe has required but little other than the usual attention. But one leak has shown itself, and that one was in Holworthy Cut; this pipe is liable to give us some trouble before long on account of its grade and depth and the fact that it is laid part of its way through a bog. All the gates, blow-offs, and air-valves have been inspected, and marked as usual.

Payson Park Reservoir.

The trees and bushes have been chopped down, and the land cleared, ready for the contractor, Richard A. Malone, of Lancaster, Pa., who began work November 2d.

4278 cubic yards of loam have been stripped and piled on the ground, to be used to cover the banks when they are built.

Hobbs Brook Reservoir.

On October 22d, the construction of Hobbs Brook Reservoir began. A gang of choppers was set to work clearing the land of trees and brush, beginning at Lincoln Street and working north. Later, additional men and a number of teams were put to work. At the date of this report, we have 115 men, including drivers of 35 carts.

Only Cambridge men are employed, at $1.75 a day, each man to pay his own fare to and from the work, and his board and

lodging during the week. Cambridge teams are employed, in so far as we have been able to obtain them, at $2.75 a day, the owner to pay all expense of himself and team.

Conclusion.

Following will be found the Engineer's Report, together with a statement of details of the past year's work, and the stock used and now on hand.

All of which is respectfully submitted,

JOHN L. HARRINGTON,
Superintendent.

REPORT OF THE ENGINEER OF THE PUMPING STATION.

PUMPING STATION CAMBRIDGE WATER WORKS,
December 1st, 1894.

John L. Harrington, Esq., Superintendent:

SIR, — I would respectfully report the machinery at the pumping station in good condition, only slight repairs having been required during the past year. On July 1st the high service was shut off from the stand-pipe and a relief valve connected with the pumping main at the pumping station, since which time the service has been supplied by pumping directly into the mains, increasing the pressure about 8 pounds per square inch.

Following will be found the usual statement and tables.

Respectfully submitted,

EDWIN C. BROOKS,
Engineer.

STATEMENT.

$1449\frac{440}{2240}$ tons Cumberland coal @ $4.62	$6,694.47
Oil, waste, packing, etc.	224.29
Repairs on engines and boilers	87.01
Repairs on buildings and care of grounds	424.28
Tools and instruments	114.58
Lighting	25.69
Expressing	8.30
Ice	47.75
Salaries	6,429.43
	$14,055.80

Engine Record, Pond Levels, and Rainfall.

Date.	Low Service Engines.						High Service Engine.			Total Water Pumped.	Daily Average Water Pumped.	Total Coal Consumed.	Daily Average Coal Consumed.	Average Height of Pond.	Rainfall.
	Engine No. 1.			Engine No. 2.											
	Running Time.		Water Pumped.	Running Time.		Water Pumped.	Running Time.		Water Pumped.						
	Hrs.	Min.	Gallons.	Hrs.	Min.	Gallons.	Hrs.	Min.	Gallons.	Gallons.	Gallons.	Lbs.	Lbs.	Feet.	Inches.
December, 1893	—	—	—	428	50	170,008,850	744	—	18,409,500	188,418,350	6,078,011	299,400	9,658	12.84	5.23
January, 1894	419	15	166,221,550	—	—	—	744	—	19,494,810	185,716,360	5,990,850	288,000	9,290	14.09	3.05
February, "	390	45	155,485,550	—	—	—	672	—	18,461,070	173,946,620	6,212,379	279,000	9,964	15.59	2.91
March, "	—	—	—	404	15	150,797,350	744	—	18,607,410	169,404,760	5,464,670	264,000	8,516	16.34	.84
April, "	—	—	—	382	30	143,387,200	720	—	18,172,035	161,559,235	5,385,308	238,900	7,963	16.67	2.94
May, "	415	15	162,786,250	—.	—	—	744	—	20,189,702	182,975,952	5,902,450	279,500	9,016	16.81	4.63
June, "	433	15	176,943,800	—	—	—	717	—	20,260,215	197,204,015	6,573,467	268,600	8,953	16 56	.81
July, "	3	50	947,650	471	15	188,821,600	744	—	15,940,080	205,709,330	6,635,785	289,000	9,323	15.63	2.88
August, "	—	—	—	447	10	167,080,100	738	30	12,420,405	179,500,505	5,790,339	265,800	8,574	13.28	1.63
September, "	420	30	154,511,500	—	—	—	720	—	13,059,540	167,571,040	5,585,701	258,700	8,623	11.09	2.40
October, "	407	15	149,641,800	—	—	—	744	—	14,118,390	163,760,190	5,282,587	258,100	8,326	11.16	5.19
November, "	—	—	—	384	45	138,463,050	720	—	13,649,220	152,112,270	5,070,409	257,200	8,573	12.08	3.34
Total	2,490	05	966,538,100	2,518	45	958,558,150	8,751	30	202,782,377	2,127,878,627	—	3,246,200	—	—	35.85
Daily Average .	6	49	2,648,050	6	54	2,626,187	23	59	555,568	5,829,804	—	8,994	—	14.35	

Stock on Hand December 1, 1894.

731 tons Cumberland coal, 10 gallons cylinder oil, 17 gallons engine oil, 5 gallons kerosene, 15 lbs. tallow, 140 lbs. cotton waste, 18 lbs. rubber packing, 32 lbs. Usidurian packing, 10 lbs. flax packing, 20 lbs. square flax packing, 2 lbs. asbestos packing, 6 manhole gaskets, 12 gauge glasses, 4 lantern globes, 12 files, 70 lbs. soap, 175 fire bricks, 1 bbl. fire clay, 1 bbl. cement, 500 lbs. bolts and nuts, 1 lot brass pipe, 1 lot iron pipe, 1 lot pipe fittings.

Tools, Furniture, and Instruments.

1 18-in.x10-ft. engine lathe, with chucks, tools, etc., 1 5-in.x6-in. engine, 1 lot shafting, pulleys and belting, 1 pipe threading machine, with dies, 1 grindstone, 1 emery wheel, 2 vices, 2 vice benches, 3 die plates and dies, 1 set pipe taps, 1 set hand taps, 2 pipe cutters, 14 pairs pipe tongs, 5 Stillson wrenches, 32 fork wrenches, 38 socket wrenches, 4 gate wrenches, 1 hydrant wrench, 6 screw wrenches, 3 hammers, 1 copper hammer, 20 cold chisels, 1 hand bellows, 20 files, 2 clamps, 2 jackscrews, 2 ratchets, 30 drills, 1 breast drill, 6 steel bars, 2 soldering irons, 18 eye bolts, 75 starting bolts, 4 cylinder head cranes, 1 chain fall, 4 tackles, 2 ladles, 4 wooden horses, 1 oil cabinet, 1 set measures, 1 lot oil cans, 1 oil pump, 1 carpenter's bench and tools, 2 axes, 2 hatchets, 1 lot fire tools, 1 coal car, 1 pair platform scales, 1 tube scraper, 2 wheelbarrows, 14 scoop shovels, 2 long-handled shovels, 1 forge, 1 anvil, 1 sledge, 6 pairs tongs, 2 hand chisels, 2 lawn mowers, 2 rakes, 1 spade, 1 weeder, 1 pick, 3 forks, 1 ice saw, 1 ice chisel, 4 ladders, 4 stepladders, 200 ft. 2-in. hose and pipe, 50 ft. ½-in. hose and pipe, 6 fire pails, 8 water pails, 1 window brush, 2 floor brushes, 2 dust brushes, 1 feather duster, 1 dust pan, 1 lot matting, 3 mats, 5 spittoons, 1 lot gas fixtures, 1 dynamo, 1 arc lamp, 4 bracket lamps, 1 lot incandescent lamps and fixtures, 2 lanterns, 3 hand lamps, 1 desk, 2 tables, 12 chairs, 2 clocks, 3 recording gauges, 1 barometer, 1 thermometer, 1 hygrophant, 1 indicator, 2 rain gauges, 1 snow gauge, 1 belt clamp, 1 lot belting, 1 Hancock inspirator.

REPORT OF THE CHIEF ENGINEER OF THE FIRE DEPARTMENT.

CHIEF ENGINEER'S OFFICE, CITY HALL,
CAMBRIDGE, December 24, 1894.

To His Honor the Mayor and the City Council: —

GENTLEMEN: In compliance with the provisions of Section 6 of the ordinance governing the Fire Department, I have the honor to herewith present my sixteenth annual report.

Manual Force.

During the early part of the year the numerical strength of the force was increased by the addition of a chemical engine company of three men, and a hook and ladder company of eight men; making a total of 118 officers and men available for fire duty at the present time, there being one vacancy in the call force.

Of this number thirty-nine are permanently employed, and seventy-nine are call men.

Apparatus.

The aerial ladder truck which was contracted for in 1893 was delivered in this city as per agreement. After a thorough and satisfactory exhibition of its merits, it was accepted and put in service on the second day of April.

A contract was signed on February 24 for a chemical engine of the "Babcock" pattern, with double tanks, of 60 gallons capacity each. The engine was delivered, and, after having been satisfactorily tested, was put in service on the seventh day of June.

The apparatus of the department in active service and in good working condition is composed of 6 steam fire engines, with 4 hose wagons and 2 hose carriages, 2 chemical engines,

2 hook and ladder trucks, 1 aerial ladder truck, 18 chemical extinguishers, 6 fuel or exercise wagons, and chief's wagon.

The reserve or spare apparatus is composed of 1 steam fire engine, 2 hose carriages, 1 ladder truck, a chief's wagon, and 3 hose pungs.

I would renew my recommendation of last year, that the relief engine be disposed of and that a new engine be bought. I would also recommend that a hose wagon be purchased to take the place of the hose carriage now in service at Engine House No. 4.

It will be necessary the coming year to provide for the purchase of a steamer, hose wagon, and fuel wagon, to be located in the new engine house on Main Street.

Hose.

The total amount of two and one-half inch cotton rubber-lined hose now in the service, and in good condition, is 11,500 feet. During the year 250 feet have been condemned.

There are also 700 feet of rubber and 300 feet of cotton chemical engine hose in use.

Hydrants.

The hydrant service has been greatly improved by the addition of larger pipes and additional hydrants. The total number of hydrants now available for fire purposes is 831. A large number of the old flush pattern have been replaced with the post hydrant.

Horses.

During the year one horse has died, and three have been disposed of on account of lameness, which rendered them unfit for the service. One of them was sold, and two disposed of in exchange for other horses. Seven horses have been purchased. There are now 31 horses in the service, and with but one or two exceptions, they are well suited for the work required of them.

Houses.

The new double house on Front Street, erected for the accommodation of Engine No. 2 and the aerial ladder truck,

was turned over to this department on the second day of January.

Engine Company No. 2 abandoned its old house on Main Street and took possession of its new quarters on February 6. The truck company was organized and took possession of its quarters on April 2.

I would again call your attention to the need of a shed at Engine House No. 5, for the accommodation of a wagon, and a bin for cannel coal to be used in case of fire in that district. Also that such alterations be made, as may be deemed advisable, that will give more light and better ventilation in the stable.

Appropriation and Expenditures.

The appropriation for the maintenance of this department for the year ending November 30, was $73,000; the expenditures were $72,488.69, leaving an unexpended balance of $511.31.

The revenue for the year from the sale of old material and the keeping of one horse used by the Electric Wires Department, was $185.65.

Fires and Alarms.

The total number of fires and alarms from all causes was 219. Of this number 160 were bell alarms, 50 still alarms, 4 second alarms, and 5 third alarms.

During the year a portion of this department rendered assistance at 5 fires out of the city.

The most serious fire during the year, as regards loss, was that at Holt & Bugbee's lumber yard, on East Street, which caused a loss of $91,654.

The losses caused by fire for the year, together with the insurance and the amount of insurance paid, was as follows: —

	Losses.	Insurance.	Insurance Paid.
On Buildings	$42,874 34	$376,044 54	$36,133 01
On Contents	112,766 55	235,351 19	112,786 30
Total	$155,640 89	$611,395 73	$148,919 31

Casualties.

Engine Company No. 1.

Lieut. John L. Jones, Jr., severely injured his back by falling through a hatchway March 17.

John W. Johnston, hoseman, severely cut on hand by falling glass July 12.

Engine Company No. 2.

Lieut. Arthur C. Day, foot severely burned by hot plaster dropping into his boot June 2.

Charles H. Cutting, hoseman, hand severely cut by falling glass August 14.

Engine Company No. 3.

Lieut. John F. Brassel received injury to his knee November 18.

Patrick J. Hayes, hoseman, wrist severely burned April 7.

George A. Garrity, hoseman, eyes injured by heat and smoke April 7.

Hook and Ladder Company No. 1.

Capt. John T. McNamee, arm injured by a falling plank July 4.

William R. Mitchell, ladderman, arm severely sprained April 7.

Hook and Ladder Company No. 2.

Elbridge L. Wheeler, ladderman, severely strained his back May 27.

On the evening of November 1, the fire department was called to dwelling house No. 8 Gore Street, occupied by Patrick Boland. Upon their arrival the house was found to be well on fire, which was caused by the overturning of a lighted kerosene lamp, which also set fire to the clothing of Annie G. and Katie F. Boland, aged four and eight years respectively, who were playing in the room at the time, burning them in a fatal manner.

Appointments, Discharges, and Transfers.

Engine Company No. 3.

William F. Newman, call captain, appointed permanent captain March 6, and assigned to Hook and Ladder Company No. 2.

Lieut. Walter Baker, appointed call captain June 19.

John F. Brassel, hoseman, appointed lieutenant June 19.

Patrick J. Hayes, hoseman, appointed a driver March 6.

Joseph W. Hopkins, hoseman, appointed a driver March 6, and assigned to Hook and Ladder Company No. 3.

Exurie J. Willmeth, hoseman, appointed tillerman March 6, and assigned to Hook and Ladder Company No 3.

Lorenzo H. Dale, driver, transferred to Engine Company No. 5.

Thomas H. McCourt and Frank McGrath were appointed hosemen June 19.

Engine Company No. 4.

William H. Barrow, hoseman, appointed assistant engineman March 6, and assigned to Chemical Engine Company No. 2.

Redmond M. Burke, Felix J. Desnoit, and John T. Henderson were appointed hosemen June 19.

Felix J. Desnoit, hoseman, resigned September 25.

Engine Company No. 5.

Charles R. Hooker, driver, transferred to Chemical Engine Company No. 2.

Engine Company No. 6.

George W. Butler, hoseman, appointed engineman, and assigned to Chemical Engine Company No. 2.

Lieut. James P. Ewell, resigned June 1.

William F. Stearns, hoseman, appointed lieutenant June 19.

James P. Welsh and Charles A. Olson were appointed hosemen June 19.

Hook and Ladder Company No. 1.

Lieut. Charles Emerson and laddermen Charles A. Sharon and John H. Dardis were transferred to Hook and Ladder Company No. 3.

Thomas H. Donlan, ladderman, appointed lieutenant March 6.

William H. Hanson, James E. Bligh, and Thomas A. Montgomery were appointed laddermen June 19.

Hook and Ladder Company No. 2.

Capt. Thomas L. Hunter was transferred to Hook and Ladder Company No. 3.

George A. Garrity and Patrick F. Dunlea, laddermen, were transferred to Engine Company No. 3 as hosemen.

Jeremiah F. Hayes, Charles H. Leddy, and James P. O'Neil were appointed laddermen June 19.

John Gaughan, ladderman, resigned November 30.

Hook and Ladder Company No. 3.

Angus H. McDonald and William Johnson were appointed laddermen June 19.

Respectfully submitted,

THOMAS J. CASEY,
Chief Engineer.

APPENDIX.

ROLL OF OFFICERS AND MEMBERS.

Engineers.

Name.	Rank.	Age.	Residence.
Permanent Force.			
Thomas J. Casey.....	Chief Engineer.....	61	449 Cambridge Street
Call Force.			
Nathaniel W. Bunker ...	Dist. Chief Engineer	51	42 Creighton Street
Charles W. Brackett	" " "	58	133 Mt. Auburn Street
William B. Cade.....	" " "	60	27 Park Street
James M. Casey.....	Chief's Driver	30	775 Cambridge Street

Engine Company No. 1.

House, Brattle Square.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
1	Edwin E. Priest...	Engineman	57	96 Winthrop Street
31	Daniel E. Powers..	Ass't Engineman	35	37 Ash Street
2	Hiram W. Hooker.	Driver of Engine	55	Engine House
36	John McCarthy...	Driver of Hose..	44	34 Mt. Auburn Street
	Call Force.			
28	Daniel E. Shea....	Captain	38	54 Banks Street
27	John L. Jones, Jr.	Lieutenant	43	209 Green Street
25	James Jefferson...	Hoseman	41	9 Eliot Street
29	Thos. H. Kneeland	"	31	1 Brattle Square
97	William H. Perry .	"	32	139 Mt. Auburn Street
30	John W. Johnston	"	24	23 Park Street
23	J. Joseph Corcoran	"	34	5 Hews Street
26	Walter E. Chapman	"	27	52 Boylston Street

Engine Company No. 2.

House, Massachusetts Avenue.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
4	Thomas Wiseman.	Engineman	50	416 Main Street
80	Jno. H. McDermott	Ass't Engineman	44	11 Dodge Street
5	John H. Walker ..	Driver of Engine	65	85 Winsor Street
6	Albert F. Sawyer..	Driver of Hose..	51	459 Main Street
	Call Force.			
32	James Cunningham	Captain	52	25 State Street
33	Arthur C. Day	Lieutenant.....	57	47 Austin Street
35	Benjamin D. Foss.	Hoseman	58	21 Cherry Street
37	John Haley	"	40	413 Main Street
39	Warren H. Dow...	"	44	414 Main Street
87	Charles A. Cairns.	"	28	402 Main Street
88	Charles H. Cutting	"	41	6 Harold Place
40	George F. Donovan	"	25	37 School Street Place

Engine Company No. 3.

House, Third Street.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
7	Hiram Blood.....	Engineman	62	40 Fifth Street
41	William H. Cairns.	Ass't Engineman	31	20 Fourth Street
8	Peter F. McSorley.	Driver of Engine	35	33 Fourth Street
49	Patrick J. Hayes..	Driver of Hose..	31	92 Gore Street
	Call Force.			
42	Walter Baker	Captain	40	91 Gore Street
48	John F. Brassel...	Lieutenant	38	12 Warren Street
45	Eliot E. Alley.....	Hoseman	58	73 Thorndike Street
46	Tim. J. Mahoney..	"	46	100 Vine Street
15	Patrick F. Dunlea.	"	33	331 Vine Street
93	George A. Garrity.	"	33	5 Pioneer Street
115	Frank McGrath...	"	30	47 Willow Street
16	Thos. H. McCourt.	"	23	199 Charles Street

Engine Company No. 4.

House, Massachusetts Avenue, near Russell Street.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
10	John E. Ricker ...	Engineman	50	456 North Avenue
55	Jeremiah O'Connor	Ass't Engineman	36	69 Spruce Street
11	George E. Muzzey.	Driver of Engine	52	28 Russell Street
12	Sylvanus G. Griffin	Driver of Hose..	47	2102 Massachusetts Av.
	Call Force.			
52	William J. Hanna.	Captain	48	20 Hubbard Avenue
50	George F. Tibbetts	Lieutenant.....	54	4 Tenney Street
56	Josiah P. Parsons.	Hoseman.....	46	17 Regent Street
51	Daniel McCaughin.	"	34	Rear 5 Russell Street
54	George F. Durgin..	"	26	12 Regent Street
53	Redmond M. Burke	"	25	37 Jackson Street
57	John F. Henderson	"	25	51 Reed Street

Engine Company No. 5.

House, Inman Square.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
13	Charles E. Conner.	Engineman	43	1337 Cambridge Street
9	Lorenzo H. Dale..	Acting Ass't Eng.	51	104 Otis Street
85	Thos. F. O'Connell	Driver of Engine	32	51 Ninth Street
68	James H. Furfey..	Driver of Hose..	37	248 Hampshire Street
	Call Force.			
59	Francis P. Scanlan	Captain	48	1343 Cambridge Street
64	William T. King..	Lieutenant.....	38	Engine House
61	Geo. W. McIntire.	Hoseman	40	70 Inman Street
67	George P. Banister.	"	34	76 Norfolk Street
66	James H. McGrath	"	37	1072 Cambridge Street
60	George W. Stevens	"	28	1307 Cambridge Street
104	Charles Barney....	"	32	1307 Cambridge Street
63	G. W. Montgomery	"	34	40 Hampshire Street

Engine Company No. 6.

House, River Street.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
98	J. Lewis Howe....	Engineman	41	184 River Street
62	Charles A. Blair ..	Ass't Engineman	33	239 Hampshire Street
38	Chas. H. Chapman	Driver of Engine	41	156 River Street
34	William Parks....	Driver of Hose..	50	208 River Street
	Call Force.			
24	John H. Brown...	Captain	43	206 River Street
103	William F. Stearns	Lieutenant	29	431 Main Street
100	John E. Savage...	Hoseman	40	13 Dodge Street
101	John H. Robbins..	"	39	35 Brookline Street
102	Melvin A. Priest..	"	37	16 Fairmont Street
73	Charles H. Waite..	"	48	27 Pine Street
106	James P. Welsh...	"	31	32 Brookline Street
75	Charles A. Olson..	"	27	8 Cherry Street

Chemical Engine Company No. 1.

House, Western Avenue.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
17	Lewis C. Clark....	Engineman	50	183 Green Street
82	James T. McCabe.	Ass't Engineman	32	18½ Green Street
18	William Haley....	Driver	46	117 Auburn Street

Chemical Engine Company No. 2.

House, Lexington Avenue.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
94	George W. Butler.	Engineman	52	171 Lake View Avenue
58	William H. Barrow	Ass't Engineman	25	182 Lake View Avenue
3	Charles R. Hooker	Driver	49	133 Lexington Avenue

Ladder Company No. 1.

House, Eliot Square.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
22	John T. McNamee	Captain	39	49 Mt. Auburn Street
19	Albert S. Benson..	Driver	51	52 Boylston Street
	Call Force.			
70	Thomas H. Donlan	Lieutenant.....	33	Ladder House No. 1
78	Wm. R. Mitchell..	Ladderman.....	41	77 Plympton Street
74	James W. Irwin...	"	39	66 Boylston Street
77	William Stolba....	"	37	91 Western Avenue
79	Edw. P. Donahue.	"	37	1 Willard Street Court
72	Joseph E. Burke..	"	31	7 Mill Street
71	Willard H. Poole..	"	36	150 River Street
65	Augustine B. Osborn	"	35	99 Mt. Auburn Street
14	Wm. H. Buchanan	"	26	9 Camden Place
109	James E. Bligh ...	"	23	23 Willow Street
107	William H. Hanson	"	27	73 Columbia Street
108	T. A. Montgomery	"	30	46 Cherry Street

Ladder Company No. 2.

House, Portland Street.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
43	Wm. F. Newman..	Captain	48	42 Winter Street
20	Thomas Mimnaugh	Driver	41	34 Warren Street
	Call Force.			
81	James F. Dalton...	Lieutenant.....	55	17 Squires Court
91	Lincoln E. Wheeler	Ladderman.....	50	48 Cherry Street
92	John Gaughan....	"	52	25 Ninth Street
90	Albert Smith.....	"	40	3 Suffolk Street
84	John B. Maguire..	"	35	148 Bridge Street
95	Louis J. Stanger..	"	38	57 Vine Street
96	Louis J. Anshelm.	"	34	187 Broadway
86	James H. Skehan .	"	24	4 Washington Street
89	John J. Balfe.....	"	23	34 Porter Street
110	James P. O'Neil ..	"	27	242 Vine Street
111	Jeremiah F. Hayes	"	28	106 Spring Street
112	Charles H. Leddy.	"	34	42 Gore Street

Ladder Company No. 3.

House, Massachusetts Avenue.

No. of Badge.	Name.	Rank.	Age.	Residence.
	Permanent Force.			
21	Thomas L. Hunter	Captain	54	42 Pearl Street
44	Joseph W. Hopkins	Driver	29	29 Norfolk Street
47	Exurie J. Willmeth	Tillerman.....	31	463 Massachusetts Ave.
	Call Force.			
69	Charles Emerson..	Lieutenant.....	49	5 Kinnaird Street
76	Charles A. Sharon.	Ladderman.....	46	Rear 13 Pine Street
99	John H. Dardis...	"	24	115 Hampshire Street
113	William Johnson..	"	33	12 Springfield Street
114	A. H. McDonald...	"	24	1192 Cambridge Street

FIRES AND ALARMS.

From December 1, 1893, to December 1, 1894.

DECEMBER.

Saturday, Dec. 2, 11.35 p.m. Still.

No. 25 Jay Street, owned by William Berry. Occupied by W. H. Duers as dwelling. Cause, smoking furnace.

Sunday, Dec. 3, 3.10 p.m. Still.

No. 59 North Street. Owned by J. H. Jordan. Occupied by several families as dwellings. Cause, smoke from a defective chimney.

Monday, Dec. 4, 2.35 p.m. Still.

No. 141 Elm Street. Owned by Hannah Connors. Occupied by several families as dwellings. No loss. Cause, soot in chimney burning.

Tuesday, Dec. 5, 8.04 p.m. Box 136.

No. 2 Austin Place. Owned by A. E. Holmes. Loss, $178. Insurance, $1,700. Occupied by J. E. Foley as dwelling. Loss, $60. Insurance, ———. Originated on third floor. Cause, unknown.

Friday, Dec. 8, 6.15 a.m. Still.

No. 40 Green Street. Owned and occupied by the New York Biscuit Co. as bakery. Cause, accidental automatic alarm.

Monday, Dec. 11, 5.30 p.m. Still.

No. 998 Cambridge Street. Owned by Mortimer Downey. Occupied by Catherine Buckley as dwelling. Loss, trifling. Cause, upsetting of a kerosene lamp.

Wednesday, Dec. 13, 6.10 a.m. Box 28.

No. 61 Harvard Street. Owned and occupied by Michael Hastings as dwelling. Loss, $15. Insurance, $1,200. Originated in a privy. Cause, unknown.

Thursday, Dec. 14, 10.30 a.m. Still.

No. 31 Second Street. Owned and occupied by Isaac Wyzanski as dwelling. Loss, trifling. Cause, thawing out water pipe.

Thursday, Dec. 14, 12.05 p.m. Still.

No. 87 Amory Street. Unoccupied dwelling. No loss. Cause, workmen carelessly setting fire to rubbish in the cellar.

Friday, Dec. 15, 1.21 a.m. Box 32.

Webster Avenue. Schoolhouse. In Somerville.

Friday, Dec. 15, 1.35 a.m. Still.

No. 211 Columbia Street. Owned by J. J. Loan. Occupied as club room. Loss, trifling. Originated on the outside of the building in some old boxes. Cause, incendiary.

Saturday, Dec. 16, 12.53 p. m. Box 51.

No. 398 Broadway. Owned and occupied by Mrs. Emmons Raymond as dwelling. Loss, trifling. Cause, drapery taking fire from a lighted match.

Saturday, Dec. 16, 5.45 p. m. Still.

No. 100 Winthrop Street. Owned by Mrs. Edmund Chapman. Occupied by Martin Brennen as dwelling. Loss, trifling. Cause, upsetting of a lighted lamp.

Monday, Dec. 18, 2.56 a.m. Box 9.

Lechmere Square. Owned and occupied by L. R. Armstrong as night-lunch wagon. Loss, $275. Insurance, $275. Cause, gasoline stove taking fire.

Saturday, Dec. 23, 9.30 p.m. Box 28.

Portland Street. Cause, boiling tar taking fire. Alarm needless.

Monday, Dec. 25, 12.41 a.m. Box 72.

No. 43 Cedar Street. Owned and occupied by R. J. Patterson as hen-coop. Loss trifling. Cause, incendiary.

Tuesday, Dec. 26, 3.30 p.m. Still.

No. 647 Cambridge Street. Owned by T. F. Quinn. Occupied by several families. No loss. Cause, fire dropping from an open chimney flue.

Wednesday, Dec. 27, 6.18 a.m. Box 53.

Mt. Auburn Street. Owned by C. D. Whetmore. Loss, $1,299. Insurance, $110,000. Occupied by several parties as dormitory. Loss trifling. Originated in the L on first floor. Cause, unknown.

Thursday, Dec. 28, 10.59 a.m. Box 82.

No. 10 Highland Avenue. Owned and occupied by R. N. Tappan as dwelling. No loss. Cause, hot ashes in barrel.

Friday, Dec. 29, 1.10 a.m. Still.

No. 286 Main Street. Ivers & Pond piano manufactory. Cause, accidental automatic alarm.

Friday, Dec. 29, 7.49 p.m. Box 153.

Grant Street. Cause, false alarm given by some malicious person.

Saturday, Dec. 30, 7.02 a.m. Box 25.

No. 34 Austin Street. Owned by W. J. Marvin. Occupied by Dr. L. F. Lathe as dwelling. Loss, trifling. Cause, gas jet igniting drapery.

Sunday, Dec. 31, 4.40 p.m. Still.

No. 26 Inman Street. Owned by Elias Howe. Occupied by W. J. Winn as dwelling. No loss. Cause, soot in chimney taking fire.

JANUARY.

Wednesday, Jan. 3, 10.09 p.m. Box 75.

No. 281 Walden Street. Owned and occupied by W. W. Sands as brick manufactory. Loss, trifling. Cause, overheated dryer.

Thursday, Jan. 4, 7.55 a.m. Still.

No. 747 Cambridge Street. Owned by William Nixon. Occupied by several families as dwellings. Loss, trifling. Cause, defective chimney.

Thursday, Jan. 4, 8.16 p.m. Box 59.

No. 7 Brattle Street. Owned by Charles Moore & Co. Loss, $220. Insurance, $10,000. Occupied as a club room. Loss, trifling. Occupied by W. G. Craig as repairer of furniture. Loss, $25. Insurance, $1,000. Origiuated in club room. Cause, overheated stove setting fire to partition.

Thursday, Jan. 11, 6.25 a.m. Box 48.

No. 1481 Cambridge Street. Owned and occupied by Lewis Hall as hothouse. Loss, trifling. Cause, overheated furnace.

Friday, Jan. 12, 8.30 p.m. Still.

No. 8 Sands Street. Owned by J. F. Murray. Occupied by John McNamara as dwelling. No loss. Cause, soot in chimney taking fire.

Monday, Jan. 15, 9.15 a.m. Box 158.

No. 2 Eustis Court. Owned by S. R. Ellis as stable and dwelling. Loss, $55. Insurance, $6,000. Occupied by Daniel Fraser as dwelling. Loss, trifling. Cause, child and matches.

Wednesday, Jan. 17, 4.20 p.m. Box 62.

No. 9 Hilliard Street. Owned by E. D. Fuller. Loss, $100. Insurance, $5,000. Occupied by G. L. Kittredge as dwelling. Loss, trifling. Originated in the cellar. Cause, hot ashes in barrel.

Wednesday, Jan. 17, 8.44 p. m. Box 35.

Rear 66 Norfolk Street. Owned by A. C. Lamson. Occupied by G. W. Golden as dwelling. Loss, trifling. Cause, explosion of a kerosene lamp.

Sunday, Jan. 21, 6.05 p.m. Still.

No. 90 Inman Street. Owned by W. G. Macloud. Loss, trifling. Occupied by C. H. Turner as dwelling. Cause, dropping of a lighted lamp.

Monday, Jan. 22, 11.22 p.m. Box 36.

No. 28 Prospect Street. Owned by F. L. & C. H. Pratt. Loss, trifling. Occupied by Salvation Army. Origiuated under the floor. Cause, unknown.

Thursday, Jan. 25, 3.22 a.m. Box 59.

No. 24 Palmer Street. Owned by F. L. Chapman estate. Occupied by I. P. Estes as carpenter shop. Loss, trifling. Cause, incendiary.

Thursday, Jan. 25, 9.40 p.m. Box 38.

Magazine Street. Cause, false alarm, given by some malicious person.

Saturday, Jan. 27, 11.17 p.m. Box 6.

No. 91 Main Street. Owned by G. M. Rogers estate. Loss, $20. Insurance, $6,500. Occupied by Jane Black as dwelling. Loss, trifling. Cause, breaking of a lighted kerosene lamp.

Wednesday, Jan. 31, 5.53 p.m. Box 41.

No. 385 Putnam Avenue. Owned and occupied by Dover Stamping Co. as tinware manufacturers. Cause, kettle of grease taking fire. Alarm needless.

Wednesday, Jan. 31, 8.43 p.m. Box 31.

No. 3 Porter Street. Owned by Charles Linehan. Loss, trifling. Occupied by Timothy O'Connor as dwelling. Cause, pipe in coat pocket.

FEBRUARY.

Sunday, Feb. 4, 11 p.m. Still.

Main Street. An electric car. Cause, defect in motor.

Monday, Feb. 5, 12.12 a.m. Box 126.

No. 38 Pine Street. Owned by M. F. & R. H. Smith. Loss, $350. Insurance, $400. Occupied by E. M. Cole as stable. Loss, $330. Insurance, $900. Occupied by J. H. Finch as stable. Loss, ——. Insurance, $200.

No. 51 Cherry Street. Owned by E. Davis estate. Loss, $35. Insurance, $2,000. Occupied by T. M. Davis as dwelling. Originated in stable. Cause, supposed incendiary.

Wednesday, Feb. 7, 10 p.m. Still.

No. 590 Main Street. Occupied by Wah Lee as laundry. Cause, smoke mistaken for fire.

Friday, Feb. 9, 7.54 p.m. Box 27.

No. 46 Clark Street. Owned by A. A. Spencer. Occupied by Mary Farrell as dwelling. Loss, trifling. Cause, explosion of kerosene lamp.

Sunday, Feb. 11, 8.11 p.m. Box 26.

No. 7 Portland Street. Owned by M. A. Guddu. Loss, $160. Insurance, $2,000. Occupied by Joseph Garner as dwelling. Loss, $60. Insurance, $300. Originated in a closet. Cause, unknown.

Monday, Feb. 19, 9.55 a.m. Box 27.

No. 97 Clark Street. Owned by W. E. Casey. Loss, $35. Insurance, $1,500. Occupied by C. H. Perkins as dwelling. Cause, defective flue.

Saturday, Feb. 24, 3.35 a.m. Box 69.

No. 42 Cogswell Avenue. Owned by Augustus Lubbe. Loss, $400. Insurance, $1,800. Occupied by Augustus Lubbe as dwelling. Loss, $83. Insurance, $1,000. Originated in the L. Cause, unknown.

Saturday, Feb. 24, 10.32 a.m. Box 75.

No. 168 Raymond Street. Owned by Enoch Bean. Occupied by J. N. Mason as dwelling. No loss. Cause, thawing out water pipe.

Monday, Feb. 26, 11.36 a.m. Box 17.

No. 70 Hastings Street. Owned by T. H. Warren. Loss, $239. Insurance, $250. Occupied by Nelson Willis as dwelling. Loss, $20. No insurance. Cause, thawing out water pipe.

MARCH.

Thursday, March 1, 6.15 p.m. Box 9.

No. 86 Cambridge Street. Owned by S. B. Buck. Loss, $62. Insurance, $3,000. Occupied by several parties as stores and dwellings. Loss, trifling. Cause, rats and matches.

Thursday, March 8, 12.47 p.m. Box 26.

State Street. Owned by M. E. Rideout & Co. as moulding mill. Loss, trifling. Originated on the roof. Cause, sparks from chimney.

Thursday, March 8, 8.54 p.m. Box 23.

No. 55 Franklin Street. Owned by J. A. Proctor. Loss, $25. Insurance, $1,000. Occupied by J. A. Proctor as dwelling. Loss, trifling. Originated in a closet. Cause, boy and matches.

Saturday, March 10, 4.45 p.m. Still.

No. 85 Green Street. Owned by Charles James. Occupied by several families as dwellings. No loss. Originated in the cellar. Cause, hot ashes.

Sunday, March 11, 8.15 p.m. Box 73.

No. 148 Spruce Street. Owned and occupied by Paul St. Martin as dwelling. Loss, trifling. Originated on the roof. Cause, sparks from chimney.

Sunday, March 11, 10.58 p.m. Box 35.

No. 24 Worcester Street. Owned by C. A. Morss. Loss, $178. Insurance, $2,500. Occupied by J. H. Finch as dwelling. Loss, ——. Insurance, $1,000. Cause, supposed incendiary.

Tuesday, March 13, 5.15 a.m. Box 29.

No. 356 Winsor Street. Owned by W. O. Grover. Loss, $558. Insurance, $2,000. Occupied by R. A. Lipsett as dwelling. Loss, trifling. Originated in floor, near stove. Cause, hot coals.

Saturday, March 17, 1.35 a.m. Box 158.

No. 65 Garfield Street. Owned by G. P. Thresher. Loss, $1,146. Insurance, $2,500. Occupied by G. P. Thresher as stable. Loss, $850. Insurance, $1,000. Cause, unknown.

Saturday, March 24, 5.51 p.m. Box 36.

No. 579–581 Main Street. Owned by A. P. Morse. Loss, $1,200. Insurance, $15,000. Occupied by J. H. Corcoran & Co. as dry-goods store. Loss, $600. Insurance, $17,500. Originated between ceiling and second-story floor. Cause, electric-light wires.

Saturday, March 24, 9.42 p.m. Box 27.

No. 247 Broadway. Owned by George Close. Loss, $103. Insurance, $2,000. Occupied by J. T. Wren as dwelling. Loss, trifling. Originated in an unused room on third floor. Cause, unknown.

Wednesday, Mareh 28, 11.35 a.m. Box 38.

No. 135 Pearl Street. Owned by heirs of John Lennon. Loss, trifling. Occupied as dwelling. Originated in roof of L. Cause, unknown.

Wednesday, Mareh 28, 11.39 a.m. Box 31.

No. 6 Harding Street. Cause, smoke mistaken for fire.

Thursday, March 29, 9.45 a.m. Still.

No. 58 Winter Street. Oeeupied as dwelling. Cause, soot in chimney taking fire.

Friday, Mareh 30, 12.11 p.m. Box 59.

North Avenue. Load of furniture owned by M. M. Chick. Loss, $150. Cause, sparks from driver's tobacco pipe.

Friday, March 30, 5.26 p.m. Box 71.

Washburn Avenue. Cause, burning rubbish on dump.

Friday, Mareh 30, 11.20 p.m. Still.

No. 19 River Street. Owned by Cambridge Improvement Co. Oecupied by W. A. Freeman, as carpet beater. Loss, trifling. Originated in stairway. Cause, incendiary.

Saturday, Mareh 31, 8.35–8.57. Box 212.

No. 72 Main Street. Edward Kendall & Sons, boiler works. Both alarms were aceidental, and caused by the throwing of iron against the building on which the fire-alarm box was located, thereby jarring the box and eausing it to operate.

APRIL.

Sunday, April 1, 3.03 p.m. Box 59.

Dunster Street. Owned and oeeupied by West End Railroad Co. as repair shop. Loss, trifling. Originated in a work bench in the basement. Cause, unknown.

Thursday, April 5, 8.30 p.m. Still.

No. 46 Second Street. Owned and oceupied by Louis Goldstein as dwelling. Loss, trifling. Originated in a bedroom. Cause, child and matehes.

Saturday, April 7, 12.39–12.46–12.51 p.m. Box 9.

No. 17 East Street. Owned by Holt & Bugbee. Loss, $8,893. Insuranee, $7,300. Oceupied by Holt & Bugbee as lumber yard. Loss, $81,967. Insuranee, $97,000. — No. 31 East Street. Owned by Holt & Bugbee. Oeeupied by J. W. Donovan as dwelling. Loss, $400. Insuranee, $1,000. — No. 18 East Street. Owned by M. J. Hanlon. Loss, $36. Insurance, $1,600. Occupied by James Lane as dwelling. — Nos. 20 to 30 East Street. Owned by Lewis Hall. Loss, $358. Insurance, $7,600. Oecupied by several families as dwellings. Originated in second story of drying house in lumber yard. Cause, unknown.

Wednesday, April 11, 9.03 p.m. Box 4.

No. 13 Lambert Street. Owned and oeeupied by M. A. Gibbons as dwelling. Loss, $56. Insurance, $1,600. Originated in a spare room amongst old elothes. Cause, unknown.

Thursday, April 12, 10.55 a.m. Still.

No. 286 Main Street. Ivers & Pond piano manufactory. Cause, accidental automatic alarm.

Thursday, April 19, 1.11 p.m. Box 34.

No. 315 Columbia Street. Owned by A. H. Garland. Loss, $80. Insurance, $1,000. Unoccupied dwelling. Cause, unknown.

Thursday, April 26, 1.40 p.m. Still.

No. 130 Inman Street. Owned by S. L. Montague. Occupied by D. J. Keefe & Co. as plumbers. Loss, trifling. Cause, oakum taking fire from a lighted lamp.

MAY.

Wednesday, May 2, 8.29 p.m. Box 71.

No. 849 North Avenue. Owned by Michael Whalen. Loss, $45. Insurance, $2,000. Occupied by Michael Whalen as dwelling. Loss, $95. Insurance, $750. Originated in a closet. Cause, clothes taking fire from a lighted lamp.

Saturday, May 5, 6.25 p.m. Box 137.

No. 58 Howard Street. Owned by George Coon. Occupied by J. H. Stafford as dwelling. Loss, trifling. Originated in a curtain. Cause, child and matches.

Thursday, May 10, 7.20 p.m. Still.

No. 460 Main Street. Owned and occupied by C. A. Sawyer as paint shop. Loss, trifling. Originated in oily overalls. Cause, spontaneous combustion.

Saturday, May 12, 5.32 p.m. Box 45.

No. 222 Franklin Street. Owned by Mary Hollaran as dwelling. No loss. Cause, soot in chimney taking fire.

Saturday, May 12, 6.36 p.m. Box 16.

Nos. 81 and 83 Broadway. Owned by Fiske heirs. Loss, trifling. Occupied as dwellings. Originated on the roof. Cause, sparks from chimney.

Monday, May 14, 8.03 a.m. Box 68.

No. 334 North Avenue. Owned by F. Ivers estate. Occupied by G. V. Eldridge as plumber. Loss, trifling. Cause, dropping of a lighted match into oakum.

Monday, May 14, 10.06 a.m. Box 168.

No. 4 Cogswell Place. Owned by Charles Bigwood. Loss, $37. Insurance, $3,000. Occupied by Daniel O'Callahan as dwelling. Loss, $75. No insurance. Originated in a bedroom. Cause, child and matches.

Tuesday, May 15, 6.06 p.m. Box 25.

Tremont Street, Boston. Cause, assistance called for. Engine Companies Nos. 2 and 6 responded.

Thursday, May 17, 7.22 a.m. Box 6.

Third Street. Owned by J. C. Ayer. Occupied by Moore & Co. as wagon shed. Loss, trifling. Originated on the roof. Cause, sparks.

Saturday, May 19, 3.20 p.m. Still.

No. 114 Washington Avenue. Owned and occupied by G. E. Howe as dwelling. Loss, trifling. Cause, ignition of naphtha.

Saturday, May 19, 11.15 p.m. Box 41.

No. 24 Somerset Street. Owned by John McDonald. Occupied by Ernest Barber as dwelling. Loss, trifling. Originated in clothes hanging in entry. Cause, unknown.

Sunday, May 20, 9.15 p.m. Still.

No. 19 Fifth Street. Occupied by Mrs. Lizzie Jennings as dwelling. No loss. Cause, soot in chimney taking fire.

Friday, May 25, 5.22 p.m. Box 68.

No. 226 North Avenue. Owned by A. J. Lovell. Loss, $40. Insurance, $20,000. Occupied by H. A. Norton as dwelling. Loss, $45. Insurance, $1,500. Cause, dropping of a lighted match into a basket of paper.

Sunday, May 27, 2.13–2.20 a.m. Box 21.

Waverly Street. Owned by Edmund Reardon, trustee. Loss, $100. Insurance, $40,000. Occupied by John Reardon & Sons. Loss, $320. Insurance, $8,000. Cause, slacking of lime.

Sunday, May 27, 2.08 p.m. Box 72.

No. 23 Montgomery Street. Owned by J. D. Gillecuddy. Loss, $480. Insurance, $2,000. Occupied by J. D. Gillecuddy as dwelling. Loss, $200. Insurance, $300. Originated near chimney in attic. Cause, unknown.

Sunday, May 27, 8 p.m. Box 169.

No. 3 Wilson Court. Owned by J. F. Wilson. Occupied by Mrs. Joseph Perchett as dwelling. Loss, trifling. Cause, breaking of a lamp.

Wednesday, May 30, 8.39 p.m. Box 72.

Fire in Arlington. Gage's ice house. Assistance called for. Engine Company No. 4 responded.

Wednesday, May 30, 11.39 p.m. Box 169.

McLean Place. Owned by W. F. Ward. Loss, $1,400. Insurance, $1,500. Occupied by D. P. Sweeney as stable. Loss, $275. Insurance, $500. Cause, supposed to be of incendiary origin.

Thursday, May 31, 9.28 a.m. Box 27.

No. 23 Boardman Street. Owned by Hiram Nevons estate. Loss, $180. Insurance, $4,000. Occupied by B. R. Kinsman as dwelling. Loss, trifling. Originated in the L. Cause, unknown.

JUNE.

Saturday, June 2, 3.45 a.m. Box 17.

No. 321 Main Street. Owned by G. M. Rogers estate. Loss, $900. Insurance, $4,000. Occupied by several families as dwellings. Loss, $480. Insurance, $300. Originated in the front stairway. Cause, unknown.

Sunday, June 3, 2.15 p.m. Still.

McLean Place. Cause, rekindling of fire.

Monday, June 4, 6.35 a.m. Still.

No. 5 Bow Street. Owned by N. S. Shaler. Occupied by Harvard Athletic Club as club house. Loss, trifling. Originated in servants' bedroom. Cause, unknown.

Thursday, June 7, 12.20 p.m. Still.

Eliot Square. An electric car. Cause, defective motor.

Sunday, June 10, 4 p.m. Still.

No. 424 North Avenue. Owned and occupied by Henderson Bros. as carriage manufactory. No damage claimed. Originated on outside of building. Cause, ignition of oiled rags.

Friday, June 15, 5.35 p.m. Still.

No. 769 Cambridge Street. Cause, soot in chimney taking fire.

Saturday, June 16, 6.45 p.m. Still.

No. 241 Cambridge Street. Occupied by McCloskey & Harty as grocery. Loss, $10. Insurance, $10. Originated in an awning. Cause, sparks.

Sunday, June 17, 3.45 a.m. Box 26.

No. 30 School Street. Owned by E. D. Brooks. Occupied by Thomas McCrea as dwelling. Loss, trifling. Originated in the attic. Cause, unknown.

Monday, June 18, 8 a.m. Box 14.

No. 612 Cambridge Street. Owned by H. P. Dennison. Loss, $140. Insurance, $5,000. Occupied by A. P. Armstrong as fruit store. Loss, $797. Insurance, $2,000. Originated amongst fireworks. Cause, child and slow match.

Monday, June 18, 11.54 a.m. Box 9.

Rear 140 Cambridge Street. Owned by S. B. Buck as unoccupied dwelling. Loss, $5. Insurance, $1,600. Originated on the roof. Cause, fire-crackers.

Monday, June 18, 2.40 p.m. Box 137.

No. 85 Western Avenue. Owned by William Childs. Loss, trifling. Occupied as dwelling. Originated in steps on outside of building. Cause, fire-crackers.

Tuesday, June 19, 6.34 p.m. Box 75.

Raymond Street. Owned by A. H. Hews & Co. Loss, $500. No insurance. Occupied by Parry Bros. as an unused boiler and engine house. Loss, $800. No insurance. Cause, set on fire by children.

Friday, June 22, 1 p.m. Still.

Fire in Somerville. Assistance called for. Engine Company No. 4 responded.

Friday, June 22, 8.40 p.m. Box 69.

Haskell Street. Owned by F. P. Parker as unfinished dwelling. No loss. Cause, breaking of a lantern.

Saturday, June 23, 12.44 p.m. Box 4.

Fire in Somerville. Walker's oil-works. Engine Companies Nos. 3, 2, and 5, Chemical Company No. 1, and Ladder Companies Nos. 2 and 3 rendered assistance.

Saturday, June 23, 1.06 p.m. Box 12.

Fifth Street. Owned by heirs of J. C. Wellington as stable. Loss, trifling. Cause, sparks from oil-works fire.

Saturday, June 23, 10.16–10.30 p.m. Box 271.

Rear No. 9 Frank Street. Owned by S. F. Woodbridge. Loss, $1,473. Insurance, $2,500. Occupied by Bradon & Cooper, *et als.*, as morocco dressing. Loss, $2,353. Insurance, $7,000. Cause, unknown.

Sunday, June 24, 1.38 p.m. Box 9.

No. 41 Otis Street. Owned by J. L. Axtman. Loss, $450. Insurance, $600. Occupied by W. W. Kneeland as carpenter shop. Loss, $103. Insurance, $400. Cause, unknown.

Sunday, June 24, 3.35 p.m. Box 72.

Montgomery Street. Owned by Dennis Cowan as ropewalk. Loss, trifling. Originated on outside in paper. Cause, children and matches.

Monday, June 25, 2.47 p.m. Box 36.

No. 593½ Main Street. Occupied by A. A. Shaw as dentist. Loss, trifling. Cause, ignition of ether.

Monday, June 25, 11.23 p.m. Box 17.

No. 93 Hastings Street. Owned by Joseph Hall. Loss, $20. Insurance, $2,000. Occupied by several families as dwellings. No loss. Cause, heat from parlor lamp igniting wood-work in ceiling.

Thursday, June 28, 10.21 a.m. Box 27.

Rear No. 99 Clark Street. Owned by Thomas Wiseman as a dilapidated dwelling. No loss. Cause, set on fire by children.

Saturday, June 30, 4.43 p.m. Box 16.

No. 54 Broadway. Occupied by Abby Bartlett as dwelling. No loss. Cause, ignition of pan of fat on stove.

JULY.

Sunday, July 1, 6.15 p.m. Still.

Rear 222 Main Street. Cause, rubbish burning on dump.

Monday, July 2, 9.45 a.m. Still.

Sands Street. Owned and occupied by H. C. Langill as saw-mill. Loss, trifling. Originated on roof. Cause, sparks.

Tuesday, July 3, 11.15 p.m. Box 71.

No. 817 North Avenue. Owned and occupied by John Cronin as shed. Loss, trifling. Originated on roof. Cause, fire-crackers.

Wednesday, July 4, 3.30 a.m. Box 153.

Dyke Street. Owned by Zebar Hayden. Loss, $40. Insurance, $250. Occupied by Zebar Hayden as carpenter shop. Loss, $15. Insurance, $200. Cause, incendiary.

Wednesday, July 4, 3.43 a.m. Box 72.

McLean Place. Owned by W. F. Ward. Loss, $100. No insurance. Occupied by D. P. Sweeney as wagon shed. Loss, $300. Insurance, $300. Cause, incendiary.

Thursday, July 5, 9.15 a.m. Box 12.

Foot of East Street. Owned by Boston & Maine Railroad Co. Occupied by G. C. Emerson as manufacturer of kindling wood. Loss, trifling. Originated in boiler room. Cause, sparks from furnace.

Thursday, July 5, 8.41 p.m. Box 14.

Bacon Court. Owned by estate of L. Marrett. Loss, $70. No insurance. Occupied by E. J. Nolan as stable, and storage for glassware. Loss, $450. Insurance, $700. Cause, unknown.

Friday, July 6, 4.45–4.49–4.58 p.m. Box 16.

Nos. 41 to 49 Harvard Street. Owned by A. W. Holton. Loss, $2,855. Insurance, $15,700. Occupied by Bay State Metal Works as plumbers' supplies. Loss, $2,308. Insurance, $22,500.

No. 150 Broadway. Owned by Henry Thayer & Co. Loss, $450. Insurance, $500. Occupied by Henry Thayer & Co. as storage for drugs. Loss, $625. Insurance, $1,200. Originated in metal works. Cause, explosion of gasoline tank.

Friday, July 6, 8.43 p.m. Box 16.

No. 111 Broadway. Owned and occupied by A. A. Elston as shed. No loss. Cause, sparks from fire engine.

Saturday, July 7, 11.42 a.m. Box 72.

No. 26 Montgomery Street. Owned and occupied by Luke Bresnahan as dwelling. No loss. Originated in cellar amongst paper. Cause, child and matches.

Saturday, July 7, 5.04 p.m. Box 72.

Montgomery Street. Owned by Dennis Cowan as ropewalk. Loss, trifling. Originated on roof. Cause, sparks.

Saturday, July 7, 11.30 p.m. Box 42.

Blackstone Street. Cause, false alarm given by some malicious person.

Tuesday, July 10, 11.40 p.m. Still.

No. 254 Green Street. Burning fence. Originated in barrel of rubbish. Cause, unknown.

Wednesday, July 11, 9.59 p.m. Box 73.

No. 193 Spruce Street. Owned by Bridget Fitzgerald. Loss, $487. Insurance, $500. Occupied by P. J. Fitzgerald as piggery. Loss, $1,300. Insurance, $1,500. Cause, incendiary.

Thursday, July 12, 2.55 p.m. Box 45.

Rear 174 Franklin Street. Owned and occupied by G. F. Hope as dwelling. Loss, trifling. Originated under steps. Cause, child and matches.

Thursday, July 12, 10.23–10.31–10.36 p.m. Box 71.

No. 768 North Avenue. Owned by S. A. Henderson. Loss, $4,300. Insurance, $4,300. Occupied by Middlesex Wagon Co. Loss, $8,600. Insurance, $5,500.

No. 770 North Avenue. Owned by S. A. Henderson. Loss, $2,025. Insurance, $3,500. Occupied by S. A. Henderson as dwelling. Loss, $500. Insurance, $500.

Nos. 752 and 754 North Avenue. Owned by M. T. Cavanagh. Loss, $927. Insurance, $5,200. Occupied by M. T. Cavanagh as dwelling. Loss, $400. Insurance, $500. Occupied by W. H. Cavanagh as dwelling. Loss, $100. Insurance, $700. Owned and occupied by M. T. Cavanagh as stable. Loss, $268. Insurance, $350.

No. 774 North Avenue, owned and occupied by Benjamin Lerned as workshop. Loss, $150. Insurance, $150. Originated in wagon works. Cause, supposed of incendiary origin.

Friday, July 13, 1.45 p.m. Box 9.

No. 28 East Street. Owned by Lewis Hall as dwelling. No loss. Cause, soot in chimney taking fire.

Saturday, July 14, 12.59 p.m. Box 134.

Rear No. 77 Elm Street. Cause, smoke mistaken for fire.

Sunday, July 15, 2.25 p.m. Box 35.

No. 218 Harvard Street. Owned and occupied by Mary Riley as dwelling. Loss, trifling. Cause, lamp igniting curtain.

Tuesday, July 17, 2.40 a.m. Box 168.

No. 44 Cogswell Avenue. Owned by Catherine Dolhenty. Loss, $400. Insurance, $400. Occupied by William Boyle as stable. Loss, $300. Insurance, $2,200.

No. 42 Cogswell Avenue. Owned and occupied by August Lubby as dwelling. Loss, $60. Insurance, $2,600. Owned and occupied by August Lubby as stable. Loss, $287. Insurance, $300. Originated in Boyle's stable. Cause, supposed of incendiary origin.

Thursday, July 19, 11.25 a.m. Box 14.

No. 145 Otis Street. Cause, smoke mistaken for fire.

Thursday, July 19, 3.31 p.m. Box 46.

No. 731 Main Street. Owned by Raphael Masstrangialo. Loss, trifling. Occupied by M. F. Holmes as dwelling. Loss, $60. Insurance, $1,000. Cause, ignition of naphtha.

Friday, July 20, 6.32 a.m. Box 68.

No. 25 Sparks Street. Owned by J. F. O'Brien. Occupied by J. D. Donovan as dwelling. Loss, trifling. Originated in wood-box near stove. Cause, unknown.

Friday, July 20, 11.30 a.m. Box 14.

No. 1 Eighth Street. Owned by Samuel Rosenburg. Occupied by Thomas Halley as dwelling. No loss. Cause, oil stove taking fire.

Friday, July 20, 6.24 p.m. Box 2.

Prison Point Street. Owned by Boston & Maine Railroad Co. as freight car. No loss. Originated in oiled waste. Cause, sparks.

Saturday, July 21, 1.11 p.m. Box 15.

Rear No. 128 Thorndike Street. Fence burning. Cause, hot ashes.

Saturday, July 21, 1.25 p.m. Box 34.

No. 236 Columbia Street. Owned and occupied by H. S. Angus as dwelling. Loss, $68. Insurance, $3,000. Cause, struck by lightning.

Sunday, July 22, 9.30 p.m. Box 9.

No. 15 Gore Street. Cause, smoke mistaken for fire.

Wednesday, July 25, 2.27 p.m. Box 169.

No. 48 Middlesex Street. Owned by R. W. Matheson. Loss, $550. Insurance, $2,500. Occupied by R. W. Matheson as dwelling. Loss, $206. Insurance, $1,400. Originated on roof of porch. Cause, sparks.

Friday, July 27, 11.28 p.m. Box 2.

Prison Point Street. Owned and occupied by Boston and Maine Railroad Co. as storeroom for oil. No loss. Cause, spontaneous combustion.

Saturday, July 28, 1.44 a.m. Box 43.

No. 108 Kinnaird Street. Owned by Daniel Burgess. Loss, $75. Insurance, $1,000. Occupied by John Connors as dwelling. Loss, $25. No insurance. Originated in a case of drawers. Cause, unknown.

Saturday, July 28, 5.44 p.m. Box 26.

No. 401 Main Street. Owned by H. S. Hayward. Loss, $1,865. Insurance, $5,000. Occupied by Joseph Foster as barber-shop. Loss, $600. No insurance. Occupied by H. W. Finn as dwelling. Loss, $200. No insurance. Cause, set on fire by an insane person.

Saturday, July 28, 8.05 p.m. Box 32.

No. 179 Norfolk Street. Owned and occupied by John Hugleman as shed. Loss, trifling. Originated on the outside. Cause, unknown.

Sunday, July 29, 2.37 p.m. Box 52.

No. 32 Putnam Avenue. Owned by J. E. Yagen. Loss, $45. Insurance, $4,000. Occupied by J. E. Yagen as dwelling. Loss, $89. Insurance, $800. Cause, unknown.

Monday, July 30, 2.23 p.m. Box 21.

Waverly Street. Owned by Howe estate as unoccupied dwelling. No loss. Cause, set on fire by children.

Tuesday, July 31, 10.01 a.m. Box 61.

Boylston Street. Cause, kettle of boiling tar taking fire.

Tuesday, July 31, 8.57 p.m. Box 72.

Montgomery Street. Owned and occupied by Dennis Shea as stable. Loss, $206. Insurance, $400. Originated in hayloft. Cause, unknown.

AUGUST.

Thursday, Aug. 2, 3.36 a.m. Box 271.

No. 750 North Avenue. Owned by P. F. Bresnahan. Loss, $129. Insurance, $300. Occupied by J. H. Barstol as pool room. Loss, $220. Originated under the counter amongst matches. Cause, unknown.

Monday, Aug. 6, 3.09 a.m. Box 41.

No. 77 Fairmont Street. Cause, smoke from chimney mistaken for fire.

Tuesday, Aug. 7, 9.48 a.m. Box 72.

No. 26 Montgomery Street. Owned by Luke Bresnahan as dwelling. Loss, $25. Insurance, $2,000. Originated on the roof. Cause, sparks.

Wednesday, Aug. 8, 5.15 a.m. Still.

No. 226 Main Street. Occupied by Ivers & Pond as piano manufactory. Cause, accidental automatic alarm.

Wednesday, Aug. 8, 7.45 p.m. Box 45.

No. 71 Franklin Street. Owned and occupied by J. P. Lunas as barber shop. No loss. Cause, breaking of kerosene lamp.

Saturday, Aug. 11, 3.40 p.m. Box 2.

Prison Point Street. Owned and occupied by Boston and Maine Railroad Co. as storage for oil. Loss, $20. Insurance, $20. Originated in a clothes closet. Cause, lighted pipe in coat pocket.

Tuesday, Aug. 14, 9.41 a.m. Box 26.

No. 426 Main Street. Owned by C. P. Keith. Loss, $100. Insurance, $500. Occupied by H. T. Moulton as plumber shop. Loss, $50. Insurance, $250. Cause, dropping of a lighted match into oakum.

Wednesday, Aug. 15, 5 p.m. Still.

Front Street. Owned by Boston and Albany Railroad Co. as freight car. Loss, $15. Insurance, $15. Cause, set on fire by boys.

Wednesday, Aug. 15, 6.45 p.m. Still.

Ninth Street. Owned by Boston and Albany Railroad Co. as freight car. Loss, $20. Insurance, $20. Cause, set on fire by boys.

Monday, Aug. 20, 1.42 p.m. Box 9.

Otis Street. Occupied by Otis Milling Co. as carpenters' supplies. No loss. Cause, gas jet igniting dust.

Friday, Aug. 24, 2.22 a.m. Box 15.

No. 255 Charles Street. Owned by Samuel Rindge. Occupied by Martin Diff as dwelling. Loss, trifling. Cause, defective flue.

Friday, Aug. 24, 1.10 p.m. Box 12.

No. 221 Bridge Street. Occupied by L. G. Burnham as coal-shed. No loss. Originated on the roof. Cause, sparks.

Saturday, Aug. 25, 11.56 a.m. Box 16.

Main Street. Owned by West End Street Railway Co. as stable. No loss. Originated in straw on outside of building. Cause, children and matches.

Sunday, Aug. 26, 12.40 a.m. Box 271.

No. 719 North Avenue. Owned by Abel Fitch as stable. Loss, trifling. Cause, incendiary.

Tuesday, Aug. 28, 4.45 p.m. Box 114.

Ninth Street. Freight cars on tracks of Boston and Albany Railroad, $100. Insurance, $100. Occupied by Parker & Page as lumber. Loss, $175. Insurance, $175. Cause, set on fire by boys.

Thursday, Aug. 30, 3.01 p.m. Box 2.

Craigie's Bridge. Owned by S. M. Grant as load of straw. Loss, $10. Cause, unknown.

SEPTEMBER.

Sunday, Sept. 2, 1.26 p.m. Box 14.

No. 145 Otis Street. Occupied by J. V. Lindbloom as dwelling. No loss. Originated in a barrel of rubbish in cellar. Cause, unknown.

Thursday, Sept. 6, 9.22 a.m. Still.

Ninth Street. Freight car on tracks of Boston and Albany Railroad. Occupied by New York Biscuit Co. as flour. Loss, $20. Insurance, $20. Cause, set on fire by boys.

Thursday, Sept. 6, 10.09 p.m. Box 2.

Prison Point Street. Owned by Boston & Maine Railroad Co. as freight cars. Loss, $205. Insurance, $205. Occupied as wool and cotton waste. Loss, $1,105. Insurance, $1,105. Cause, sparks from locomotive.

Friday, Sept. 7, 1.25 a.m. Box 71.

Washburn Avenue. Owned by E. K. Hall. Loss, $20. Insurance, $800. Occupied by Philip Barstol as dwelling. Originated in rags under doorsteps on outside of building. Cause, unknown.

Friday, Sept. 7, 1 p.m. Box 14.

No. 548 Cambridge Street. Occupied as dwelling. Cause, smoke mistaken for fire.

Monday, Sept. 10, 2.17 p.m. Still.

Murray Street. Owned by J. M. Hilton, as old lumber. No loss. Cause, set on fire by children.

Thursday, Sept. 13, 3.15 p.m. Box 36.

No. 131 Green Street. Owned by Herbert Fitzgerald as stable. Loss, trifling. Cause, kettle of tar taking fire.

Monday, Sept. 17, 12.05 p.m. Box 29.

No. 48½ Webster Avenue. Occupied by F. C. Dalton as dwelling. Loss, trifling. Cause, upsetting of an oil stove.

Thursday, Sept. 20, 4.15 p.m. Box 38.

Magazine Street. Cause, false alarm given by malicious boys.

Friday, Sept. 21, 7.30 a.m. Box 6.

No. 99 A Main Street. Owned by Baldwin heirs. Loss, $515. Insurance, $8,000. Occupied by John Diamantepulos as fruit store. Loss, $30. No insurance. Cause, dropping of a lighted match amongst waste paper.

Sunday, Sept. 23, 9.02 p.m. Box 48.

No. 1280 Cambridge Street. Owned by P. G. Foley. Loss, $408. Insurance, $2,700. Occupied by P. G. Foley as dwelling. Loss, $50. Insurance, $800. Occupied by P. G. Foley, as millinery goods. Loss, $2,500. Insurance, $5,000. Originated near chimney. Cause, unknown.

Monday, Sept. 24, 5.50 p.m. Still.

No. 49 Boylston Street. Occupied by D. J. O'Brien as grocery. Loss, trifling. Cause, dropping of fire into paper.

Monday, Sept. 24, 8.27 p.m. Box 41.

No. 12 Magazine Court. Owned by R. G. Nixon. Loss, $20. No insurance. Occupied by W. H. Feltman as stable. Loss, $20. No insurance. Cause, unknown.

Friday, Sept. 28, 7.01 p.m. Box 37.

No. 32 Pleasant Street. Owned by M. J. Donovan as dwelling. Loss, trifling. Originated in the cellar. Cause, breaking of a kerosene lamp.

Saturday, Sept. 29, 3.22 p.m. Box 57.

No. 55 Hammond Street. Owned and occupied by T. F. Myles as dwelling. Loss, trifling. Cause, ignition of oiled rags.

Sunday, Sept. 30, 3.20 p.m. Still.

Front Street. Empty freight on tracks of Boston and Albany Railroad. No loss. Cause, set on fire by boys.

Sunday, Sept. 30, 7.36 p.m. Box 23.

No. 78 Franklin Street. Owned by W. A. Munroe. Loss, $17. Insurance, ——. Occupied by A. F. Berry as dwelling. Cause, defective chimney.

OCTOBER.

Monday, Oct. 1, 4.35 p.m. Box 53.

No. 64 Mount Auburn Street. Occupied as club-house. No fire. Cause, gas explosion.

Monday, Oct. 1, 8 p.m. Box 52.

No. 820 Main Street. Occupied as hothouse. Cause, smoke mistaken for fire.

Wednesday, Oct. 3, 7.15 p.m. Still.

No. 1 Dickinson Street. Occupied as dwelling. Cause, smoke mistaken for fire.

Saturday, Oct. 6, 5.14 p.m. Box 114.

No. 54 Ninth Street. Owned by John Geopper as dwelling. Loss, $16. Insurance, $1,500. Unoccupied. Cause, set on fire by children.

Saturday, Oct. 6, 9.35 p.m. Box 12.

No. 211 Bridge Street. Fire in a fence. Cause, supposed by sparks from a locomotive.

Sunday, Oct. 7, 10.16 p.m. Box 43.

De Wolf Street. Owned by Margery Blakey. Loss, $500. Insurance, $500. Occupied by W. H. Davy as boat builder. Loss, $774. Insurance, $1,200. Cause, incendiary.

Sunday, Oct. 14, 10.56 a.m. Box 74.

No. 44 Bolton Street. Occupied by Abraham Le Blanc as dwelling. Loss, trifling. Originated in a bedroom. Cause, child and matches.

Monday, Oct. 15, 10.59 p.m. Box 168.

No. 564 North Avenue. Owned by G. R. Henderson. Loss, $780. Insurance, $2,000. Occupied by G. R. Henderson as carriage builder. Loss, $2,403. Insurance, $3,000. Cause, supposed by a spark from a workman's pipe.

Friday, Oct. 19, 5.55 p.m. Still.

No. 652 Main Street. Occupied by L. A. Brown as dwelling. No loss. Cause, upsetting of lighted lamp.

Saturday, Oct. 20, 7.15 a.m. Box 38.

Pearl Street. Electric car. Cause, defective motor.

Monday, Oct. 22, 2.56 p.m. Box 29.

No. 30 Berkshire Street. Owned by F. J. Coulter. Loss, $200. Insurance, $200. Occupied by F. J. Coulter as stable. Loss, $245. Insurance, $700. Owned and occupied by F. J. Coulter as dwelling. Loss, $25. Insurance, $2,800. Originated in the stable. Cause, supposed by children and matches.

Saturday, Oct. 27, 12.40 p.m. Still.

Ninth Street. Owned by Boston and Albany Railroad Co. as freight car. Loss, trifling. Cause, set on fire by boys.

Monday, Oct. 29, 5.15 p.m. Box 57.

Holmes field. Owned by Harvard College as athletic grounds. Originated in the seats. No loss. Cause, supposed set on fire by boys.

Monday, Oct. 29, 6.23–6.27–6.30 p.m. Box 36.

No. 28 Prospect Street. Owned by Salvation Army. Loss, $3,000. No insurance. Occupied by Salvation Army *et al.* Loss, $825. No insurance. Occupied by F. W. Crocker as storage of furniture. Loss, $6,000. Insurance, $4,000.

Rear 7 Essex Street. Owned by R. & C. G. Wentworth as club stable. Loss, $50. Insurance, $3,000.

No. 110 Austin Street. Owned by C. J. & G. E. Peters as dwelling. Loss, $100. Insurance, $4,500. Originated in room for storage of furniture. Cause, unknown.

NOVEMBER.

Thursday, Nov. 1, 12.25 a.m. Box 271.

No. 26 Reed Street. Owned by Jeremiah O'Keefe. Loss, $150. Insurance, $200. Occupied by Jeremiah O'Keefe as stable. Loss, $540. Insurance, $600. Cause, supposed of incendiary origin.

Friday, Nov. 2, 7.12 p.m. Box 12.

No. 8 Gore Street. Owned by F. X. Fitzpatrick. Loss, $160. Insurance, $1,600. Occupied by Patrick Boland as dwelling. Loss, $40. No insurance. Cause, upsetting of and breaking a kerosene lamp.

Sunday, Nov. 4, 5.54 p.m. Box 39.

No. 12 Florence Street. Owned and occupied by M. E. Stone as dwelling. Loss, trifling. Cause, gas jet igniting curtain.

Wednesday, Nov. 7, 6.55 p.m. Still.

No. 49 Austin Street. Owned and occupied by M. L. Hayward as dwelling. Loss, $30. Insurance, $3,500. Originated in the L. Cause, hot ashes.

Sunday, Nov. 11, 2.50 p.m. Still.

No. 209 Cambridge Street. Owned and occupied by S. H. Mitchell as dwelling and bread-store. No loss. Originated in cold-air box of furnace. Cause, sparks.

Saturday, Nov. 17, 8.02 p.m. Box 64.

No. 55 Garden Street. Owned by H. N. Wheeler. Loss, $35. Insurance, $5,000. Occupied by H. N. Wheeler as dwelling. Loss, $102. Insurance, $3,000. Cause, gas jet igniting curtain.

Sunday, Nov. 18, 12.47 a.m. Box 9; 12.55 a.m. Box 2.

First Street. Owned by A. Anderson & Co. Loss, $75. Insurance, $1,200. Occupied by A. Anderson & Co. as lumber shed. Loss, $500. Insurance, $5,000.

First Street. Owned by J. P. Ellicott. Loss, trifling. Occupied by Parker & Page as lumber shed. Loss, $990. Insurance, $29,500.

First Street. Owned and occupied by C. W. Munroe as lumber shed. Loss, $75. No insurance. Cause, incendiary.

Monday, Nov. 19, 1.30 p.m. Still.

Freight car loaded with lumber, on tracks of Boston and Albany Railroad. Loss, trifling. Cause, set on fire by boys.

Friday, Nov. 23, 4.30 p.m. Still.

No. 42 Brattle Street. Owned and occupied by Cambridge Social Union. No loss. Originated in a closet. Cause, unknown.

Monday, Nov. 26, 11.47 p.m. Box 126.

Pine Street. Cause, false alarm given by some malicious person.

Thursday, Nov. 29, 11.26 a.m. Box 12.

No. 200 Bridge Street. Owned by Sarah L. Dooley. Occupied by Edward Mullin as dwelling. Originated in a spare room amongst old clothes. Loss, trifling. Cause, unknown.

REPORT OF THE CHIEF OF POLICE.

To the Honorable the Mayor and the City Council of the City of Cambridge: —

GENTLEMEN: In compliance with the city ordinance, I have the honor to present my annual report of the work of the Police Department for the year ending November 30, 1894.

The whole number of arrests for the year has been 3,147, against 3,409 last year.

Males	2,908
Females	239
Adults	2,626
Minors	521

The offences for which arrests have been made are as follows: —

Adultery	13
Assault and battery	166
Assault, felonious	4
Assault on officer	5
Abandoning infant child	1
Arson	3
Appropriating boat	5
Bastardy	17
Breaking and entering	74
Capias	11
Common drunkard	1
Conveying leased property	2
Concealing leased property	2
Cruelty to animals	6
Default	1
Delirium tremens	7
Disturbing public peace	173
Disturbing public meeting	1
Disturbance on street car	16
Disorderly conduct	22
Drunkenness	1,815
Dipsomania	3

Embezzlement	19
Escaped prisoners	6
Evading car fare	4
Exposure of person	6
Fast driving	1
False pretence	5
Forgery	5
Fornication	4
Furnishing liquor to prisoner	1
Gaming, or present at	7
Giving false alarm of fire	1
Highway robbery	6
Idle and disorderly	3
Insane	29
Illegal transportation	9
Illegal sale of liquor	2
Keeping liquor with intent to sell	6
Keeping unlicensed dog	2
Keeping milk below standard	6
Liquor nuisance	42
Larceny	131
Larceny from building	8
Lewd and lascivious	1
Larceny from person	1
Malicious mischief	21
Manslaughter	3
Murder	1
Nightwalking	1
Non-support	29
Neglected children	15
Obtaining money by false pretence	1
Obstructing street car	2
Obstructing police officer	1
Promoting a lottery	3
Peddling without a license	17
Playing cards on the Lord's day	1
Perjury	1
Receiving stolen goods	1
Rape	1
Safe keeping	10
Stubborn children	14
Stealing a ride	15
Suspicious persons	22
Surety of the peace	1
Setting bonfire	3
Threatening	8
Truants	5
Trespass	48
Vagrants	16

Violating city ordinances	107
Violating liquor law	1
Walking on railroad track	145
Non-residents	733
Whole number of lodgers	344
Male	339
Female	5
Adults	341
Minors	3
White	341
Colored	3
Amount of property reported stolen	$6,089 75
Amount of property reported recovered	3,483 00

Miscellaneous Business.

Accidents reported	117
Buildings found open and secured	365
Cases investigated	965
Dangerous chimneys	1
Dead bodies found	12
Defective cesspools	32
Defective drains and vaults	3
Defective gas pipes	14
Defective water pipes	38
Defective hydrants	12
Defective lamps	1,610
Defective streets and sidewalks	881
Disturbances suppressed	257
Dogs killed	45
Fire alarms given	23
Fires extinguished without alarm	15
Intoxicated persons helped home	3
Lost children restored	153
Sick and injured persons assisted	60
Stray teams put up	87
Street obstructions removed	18
Water running to waste	86

City Property in Use by Police Department.

104 badges	$130 00
87 belts and billies	108 00
8 books	26 00
3 bookcases	20 00
8 bedsteads	40 00
Amount carried forward	$324 00

Amount brought forward	$324 00
Bedding and blankets	40 00
1 buggy	100 00
2 bureaus	3 00
8 clocks	25 00
80 chairs	100 00
4 carpets	50 00
2 copying machines	20 00
250 copies of police rules	40 00
11 desks	100 00
1 easy chair (matron's)	10 00
4 flags	60 00
4 horses	600 00
5 harnesses	100 00
4 horse blankets	12 00
4 halters	1 00
1 hat rack	50
6 inkstands	3 00
24 lanterns	20 00
1 letter scale	75
3 lounges	10 00
8 mirrors	14 00
3 maps	15 00
10 mats	10 00
9 pairs of handcuffs	27 00
1 police van	300 00
3 patrol wagons	1,000 00
3 police signal systems	12,000 00
93 revolvers	450 00
Ropes and stakes	10 00
3 robes (carriage)	10 00
1 rogues' gallery	150 00
3 saddles and bridles	12 00
1 safe	200 00
95 short billies	42 50
8 spittoons	2 00
1 sleigh	25 00
2 straps and weights	1 00
4 stretchers	6 00
2 stoves	15 00
1 telephone line	300 00
3 thermometers	75
6 tables	24 00
40 tin dippers	9 00
25 towels	4 00
1 typewriter	140 00
2 umbrella stands	2 00
Amount carried forward	$16,388 50

Amount brought forward	$16,388 50
1 wagon van (old)	25 00
5 waste baskets	1 00
4 water coolers	25 00
1 wardrobe	10 00
6 water pails	1 00
2 wagon jacks	2 00
1 operating chair and table	37 50
Miscellaneous	10 00
Total	$16,500 00

Expenditures.

Books	$142 75
Boarding horses	300 00
Buttons	70 00
Boston Ice Co.	11 25
Carriage hire	9 00
Cambridge Gas Light Co.	1,096 90
Cambridge Electric Light Co.	51 07
Cleaning stations	120 00
Clipping horses	9 00
Cloth for department	573 97
Cabinet for signal system	125 00
Changing gas fixtures	34 54
Directories for department	20 00
Diaries for department	112 53
Expressing	8 30
Expert testimony	15 00
Fresh Pond Ice Co.	26 19
Hay and grain	718 34
Horse hire	15 00
Medical attendance	35 00
Medicines	10 50
Medical cabinets (3)	60 00
New England Telephone Co.	1,410 80
Operating table and chair	37 50
Photographs for rogues' gallery	12 50
Policemen, services of	96,788 84
Printing	146 60
Repairs on wagons	219 70
Repairs on harnesses	21 95
Revolvers for department	25 00
Repairs on revolvers	19 78
Rent of bicycle	30 00
Salary of Chief of Police	1,800 00
Salary of Captains and Chief Inspector	4,844 00
Amount carried forward	$108,921 01

Amount brought forward	$108,921 01
Shoeing horses	132 00
Supplies for stations	788 31
Supplies for medical cabinets	54 10
Travelling expenses	43 49
Use of boat	6 00
West End Street R. R. Co. (tickets)	300 00
Total	$110,244 91

Appropriation and estimated revenue	$111,000 00
Total cost of the department for the year	110,244 91
Balance unexpended	$755 09

Expenditures	$110,244 91
Receipts	5,954 90
Balance showing actual cost	$104,290 01

The Force.

The organization of the force consists of a chief, three captains, one inspector, eight sergeants, eighty-two patrolmen, four drivers of patrol wagons, and two matrons.

Two sergeants and twenty-two patrolmen are on duty in the daytime: one sergeant as court officer, and one sergeant at the Public Library; one patrolman is stationed at the City Hall, one detailed as clerk at Police Headquarters, and one has charge of Police Station Four.

During the night-time there are six sergeants and sixty (60) patrolmen on duty: two patrolmen as house officers at Stations 1 and 4, two patrolmen in the wagon houses, and fifty-six (56) patrolmen divided into two reliefs.

Edward Joyce.

DIED JANUARY 2, 1894.

He was appointed a member of the Police Department May 12, 1884. He was an efficient officer, popular with the public, loved and respected by the members of the department.

Changes.

During the past year one officer has died, one officer has been discharged, one officer has resigned, and three appointments have been made all under the civil service rules.

No-License Law.

As in former years under the no-license law, every effort has been made to suppress the illegal sale of intoxicating liquor.

During the past year sixty-one (61) search warrants have been served; twenty-eight (28) were convicted by the Court, and fines amounting to $1,680 and sentences amounting to sixteen (16) months imposed.

I feel that there has been a large decrease in the number of kitchen bar-rooms from former years.

Police Cloth.

I have bought police cloth during the past year to the amount of $573.97. The money received from the sale of cloth has been turned into the city treasury, and I now have cloth on hand to the amount of $96.66.

Matrons.

There have been two hundred and thirty-nine (239) females arrested during the year, against two hundred and thirty-seven (237) last year.

The female prisoners are all sent to Police Station 1, where they are in charge of the matrons until sent to the court.

Recommendations.

I would respectfully recommend an increase of four officers to the department: two to be placed in District 1, Ward 5, two to be placed in District 2, making a night route on Massachusetts Avenue from Inman Street to Columbia Street, keeping that part of Massachusetts Avenue continually covered from 6 o'clock P. M. to 8 o'clock A. M.

I would also recommend the purchase of six additional signal boxes to be placed in Districts 1 and 2.

I would also recommend the remodelling of the cell-room in Police Station 2 by taking out the old brick cells and placing

in their stead the improved iron cages, thereby giving seven additional cells, which are very much needed, as it is often necessary to put two, and sometimes three, in a cell together for want of room ; this change will also give much better light and ventilation as well as the additional cells.

Conclusion.

In concluding this report I desire to tender my thanks to His Honor the Mayor, the Committee of Police, and all others who have so kindly assisted me in the performance of my duty.

It gives me great pleasure to state that the general discipline of the members of the department has been good, and that they have shown a commendable desire to do their duty at all times.

Very respectfully,

LOTHROP J. CLOYES,

Chief of Police.

REPORT OF THE BOARD OF HEALTH.

In compliance with the public statutes creating Boards of Health and defining their duties, we have the honor to make our annual report for the year ending December 31, 1894.

We respectfully call the attention of your honorable body to the following list of complaints and nuisances investigated during the year: —

Full, overflowing, and offensive privy vaults	743
Open, defective, and leaky privy vaults	14
Filthy and defective privy-houses	5
Offensive and defective water-closets	61
Swill and garbage thrown into privy vaults	3
No proper privy vaults	2
Full and defective cesspools and catch basins	13
Defective drainage, open and broken drains	56
No traps under sinks	67
Leaky and defective traps	4
Filthy yards	282
Swill, garbage, ashes, etc., in cellars and sheds	20
Filthy stables and cow-sheds	9
Manure in yards and on lots	179
Wet and damp cellars	38
Stagnant water on premises	39
Dead animals on premises	7
Filthy buildings	9
Filthy cellars	30
Miscellaneous	36
Total	1,617

Number of inspections made	2,368
Number of subsequent inspections	6,163
Total	8,531

Number of notices issued and recorded	1,261
Number of special notices issued	137
Orders of the Board served by constable	6
Rooms fumigated	941

Number of notices for treatment of contagious diseases sent out	1,202
Number of visits to premises where contagious diseases occurred during the year	2,275
Privy vaults abolished	632

Free Vaccinations.

The free vaccination begun December 23, 1893, at Station 1, Brattle Square, Station 2, Central Square, and Station 3, Fourth Street, was continued until January 31 of the present year, when it was discontinued on account of the decrease in the number of applicants. Below is a list of the number vaccinated at the three stations.

Station One.		Station Two.		Station Three.	
Date.	No.	Date.	No.	Date.	No.
December 23, 1893	2	December 23, 1893	2	December 23, 1893	1
" 27, "	24	" 27, "	96	" 27, "	44
" 30, "	45	" 30, "	106	" 30, "	69
January 3, 1894	52	January 3, 1894	117	January 3, 1894	62
" 6, "	63	" 6, "	142	" 6, "	105
" 10, "	73	" 10, "	73	" 10, "	50
" 13, "	24	" 13, "	35	" 13, "	55
" 17, "	24	" 17, "	47	" 17, "	50
" 20, "	13	" 20, "	14	" 20, "	52
" 24, "	0	" 24, "	18	" 24, "	35
" 27, "	2	" 27, "	9	" 27, "	6
" 31, "	1	" 31, "	3	" 31, "	7
Totals.....	323		662		536

Total at Three Stations.....1,521

Public Dumps.

The condition of the Public Dumps in this city has at times been the occasion of well-grounded complaints, from the fact that improper materials were frequently dumped thereon, and that loose paper and other light combustible materials were distributed therefrom by the wind upon the adjacent streets and territory.

Endeavoring to remedy this state of affairs, the Board employed a mounted policeman during a portion of 1893 to watch the dumps, and paid for his services from its appropriation for that year (see last Annual Report).

The appropriation for 1894 was insufficient to enable the Board to continue this work. We feel that the best method of dealing with this question would be to have at least one employee of the Street Department stationed at each dump, charged with the duty of seeing that no improper material is placed thereon, and of collecting and burning all the combustible material dumped there.

We recommend the passage of an ordinance requiring this.

Examination of Ice.

Chapter 39, Section 3, of Revised Ordinances of 1892, City of Cambridge, as amended by Ordinance of March 30, 1893, provides that "some time during the month of April in each year, and at such other times as he may deem proper, the said inspector shall examine, or cause to be examined, the ice, and the sources of supply of ice which is offered for sale or distribution in this city for domestic use; and he shall take samples and make, or cause to be made, proper and careful analysis of the same."

The next section provides that the inspector shall make full report to the Board of Health of any analysis made by virtue of that ordinance. The Inspector of Milk and Vinegar in this city is charged with the above duties relating to the inspection of ice and of its sources of supply. When the report of this Inspector was presented to this Board in 1894, the Board directed his attention to the insufficiency of that part of the report relating to the sources of supply of the ice used for

domestic purposes in this city,— no information concerning such sources being given beyond the bare statement of the name of the pond or stream whereon the ice was stated to have been cut, and the name of the town wherein it was situated, — and requested the Inspector to furnish the Board with such further information touching the sources of supply as would show whether or not the ice sold therefrom was likely to be so contaminated as to be unfit for domestic use.

In his reply to this Board, June 8, 1894, the Inspector writes:

"I am unable to furnish the Board with the desired information as to the sources of the ice offered for sale in this city for domestic use, as the City Council refused to grant me the appropriation asked for and intended to cover the expense of the necessary investigation."

We desire to direct your attention to the necessity of making provision this coming year for proper inspection of the sources of supply of the ice sold here for domestic use. Of the importance of such inspection there can be no question. In the absence of such inspection of the source of supply, the chemical examination of a few samples of the ice, which is all that we have at present, is of little or no value as indicating whether or not the ice is unfit for use.

The Massachusetts State Board of Health in its Report on Water Supply and Sewerage, Part I., p. 536, for 1890 says: —

"In any case an opinion regarding the wholesomeness of a water must be based on all the information obtainable about it. In addition to the chemical and biological examination one should know the location, environment, and sources of the water, and the character and population of the drainage area. These facts, drawn from widely different sources, are all interdependent and help to interpret one another."

So long as the ordinance remains in its present form, our citizens have the right to expect that the examination which the ordinance says shall be made, has been made, and to rely in their use of ice upon its having been made; and we feel the necessity of recommending either that provision be made to enable the duties imposed by the ordinance to be performed, or that the portion of ordinance relating to the inspection of the sources of supply be repealed, as that portion is at present, in the absence of such provision, more likely to do harm than good.

Muller's Brook.

This stream, called Muller's Brook, enters Cambridge about 300 feet west of Cameron Street, in Ward 5, and continues in a westerly direction till it enters Alewife Brook. From the point of entrance into Cambridge to Clarendon Avenue, there is no wall or planking on the sides of the brook, save where it passes under Newbury Street, where it is planked on the sides. From Clarendon Avenue to a point just a little west of the rear of No. 26 Bismark Street, it is walled on both sides, while from here on to its entrance into Alewife Brook there is no wall or planking. In the rear of No. 26 Bismark Street the brook is partly obstructed by rubbish of various kinds, and in several places the sides are covered with hair, presumably from the hides treated at Muller's place, through which the brook passes. Privies, houses, and stables drain into it, and filth of various descriptions is deposited in the brook and upon its edges. It serves the purpose of a sewer in Somerville and also in the section of Cambridge through which it passes. In its present condition this open sewer is a serious hindrance to the development of property in the neighborhood, and a menace to the health of those living in its immediate vicinity. We earnestly recommend the construction of a sewer to care for the drainage now emptying into Muller's Brook, which will, unless such sewer be constructed, cause a serious nuisance in the near future.

Bird's Pond.

The frequent occurrence of malarial affections in the vicinity of Bird's Pond, and the complaints made to this Board concerning the unwholesome emanations from that pond, were the occasion of an investigation by the Board during this past summer. The bed of this pond is situated partly in Cambridge and partly in the town of Belmont. During the drought of last summer it was reduced to the condition of a water-soaked region covered with a growth of coarse grass, there being little free water present, save in some holes here and there. This drying up of the water on the surface caused, as we are informed, the death of the fish inhabiting the pond, with their

consequent putrefaction, and gave rise to offensive odors in the neighborhood. We have in this pond-bed the conditions described by Tommasi-Crudeli, the eminent Italian investigator of malaria, as favorable to the growth of the supposed germs of malarial affections; namely, permanent humidity of a soil in contact with the atmosphere, and during the summer his third condition, namely, a temperature of over 20° Centigrade, viz., 68° Farenheit.

Finding thus in that locality the very conditions for the creation of malaria, and the presence of affections which malaria causes, this Board does not hesitate to pronounce much of the sickness prevalent in that locality as due directly to the condition of that pond; and we therefore recommend the draining of Bird's Pond, and the land adjacent thereto, and the construction of a sewer as proposed by the City Engineer to that end.

Bacteriological Investigation.

Bacteriological investigation has recently demonstrated, in cases of diphtheria, the presence of a micro-organism which in the opinion of experts is the specific cause of this disease. The value of this fact to preventive medicine must at once be apparent to all when it is recognized that we have here a test which enables us to decide whether or not it is safe for a person who has been ill with an obscure throat affection to be brought into contact with other persons. This test further enables us to say at what time a person who has been ill with diphtheria ceases to be a source of danger to the public. This is of the utmost importance in deciding as to the return of children to school after an attack of this disease. Up to the present time, the certification that it was safe for them to do so has necessarily been largely a matter of guesswork, with all the attendant dangers to public health inseparable from such a method. It is imperative, in the interest of the public health, that the Board of Health should have the means to avail itself to the fullest extent of a procedure that promises so much protection against the spread of one of the most fatal diseases of childhood. Other cities of this Commonwealth have already recognized the great importance and value of this test, and have

made provision for carrying on this bacteriological work by their Boards of Health, and we trust that Cambridge may not remain behind in this essential matter.

We therefore urgently recommend that ample provision be made for bacteriological work for the Board of Health, to detect and prevent the spread of diphtheria.

Cow Stables.

The existence of tuberculosis among cattle and the possibility of the transmission to human beings of the bacillus of this disease in the milk of cows affected therewith, makes it of the utmost importance that milch cows should be surrounded by conditions favorable to the preservation of their health, so that they may be rendered, so far as is possible, capable of resisting the action of this bacillus, which appears to be one of the most widely diffused of disease-producing micro-organisms. While it is possible that cows may contract the disease even under favorable sanitary surroundings, especially if an animal already affected with the disease is introduced among them, it is known that a dry soil, good ventilation, plenty of sunlight, and cleanliness are conditions eminently hostile to the life and activity of the bacillus tuberculosis. We have therefore adopted regulations regarding Cow Stables, embodying the principles which should, we think, be enforced in every stable in the city wherein milch cows are kept.

The importance of this matter to the community and the enormous loss of life annually caused by these affections is shown by the fact that one form alone of tuberculosis, viz., pulmonary consumption, is estimated to cause one-seventh of the whole number of deaths.

It is only our long-continued familiarity with this dread disease which prevents this fact from striking us with appalling force.

A few cases of cholera, smallpox, or of yellow fever stir the community profoundly, and few object to any amount of expenditure to obtain protection against them; and yet the deaths due to all these three diseases are insignificant in comparison to the mortality due to pulmonary consumption, which

is only one of the group of tuberculous affections. In no way can sanitary authorities do more for the good of mankind than by surrounding it with every safeguard against the invasion of so destructive a group of affections as are those due to the action of the bacillus tuberculosis. We append a copy of the regulations we have adopted regarding cow stables, and which are similar in most respects to those in force in the city of Boston.

Regulations Regarding Cow Stables.

1. Every building used as a stable for cows shall contain at least one thousand cubic feet of air space for each animal kept therein.

2. The lighting and ventilation, and the condition of the roof and floor, shall be satisfactory to the Board of Health, and shall be so maintained. There shall be a sufficient supply of pure water, and such other means for maintaining the health of the animals in said stable as the Board of Health may deem necessary.

3. The stable shall be drained in a manner satisfactory to this Board, and wherever practicable shall be connected with the public sewer by a good and sufficient particular drain.

4. The manure shall be kept in a pit, constructed of brick laid in cement, with a concrete floor at least three inches thick, and ventilated as required by the Board of Health; and no more than one cord of manure shall be allowed to accumulate.

5. The animals shall be examined by a veterinarian approved by the Board of Health, whenever directed by the Board.

6. The premises shall at all times be kept in a condition satisfactory to the Board of Health.

Disinfection.

This Board has long recognized the inability of the health authorities of this city to cope with and prevent the spread of contagious diseases, in the absence of any proper provision for disinfecting articles of clothing, bedding, etc., which have been exposed to and may become the mediums of conveying contagion.

Realizing this, the Board has made strenuous efforts during the past year to have this deficiency supplied. On August 17, 1894, it addressed the following communication to the Mayor: —

OFFICE OF BOARD OF HEALTH, CAMBRIDGE, August 17, 1894.

To the Honorable the Mayor and City Council : —

We wish to lay before you the urgent necessity which exists for providing at once in this city a proper plant for the disinfecting of articles which have been exposed to contagion.

It is now universally accepted that clothing, bedding, and similar articles which have been exposed to contagion can only be disinfected by subjecting them to steam, under pressure; and recognizing this, plants for disinfecting such articles in this manner are now being generally erected, the city of Boston having three such plants. In the absence of such a plant in this city it is impossible for us to take any really effective measures to prevent the spread of contagious diseases through the medium of such clothing, etc.

The spread of contagious diseases, especially in crowded localities, and in the public schools through the medium of such infected articles, is too well recognized to call for argument, and it is clear that the city fails to take proper care for the health of its citizens, and especially of its school children, if it permits articles which have been exposed to contagion, and which are capable of conveying disease, to continue in use without having been effectually disinfected, and yet that is what is taking place every day with us, and this Board has no means at its command to prevent it.

In the hope that immediate action may be taken to furnish such a disinfecting plant, we add the following suggestion as to what should be furnished. The disinfecting plants in the city of Boston are permanent or stationary plants, requiring, of course, a plot of land on which to locate the plant, a specially constructed building to contain it, and two air-tight vans — one for bringing the infected articles to the plant, and the other for returning the articles after they have been disinfected.

While it may be ultimately desirable that this city should own and operate such a plant, we do not deem a stationary plant the only possible one; and the fact that much time may be required to select and purchase a proper lot for its location, and to erect the building thereon, together with consideration of the expense involved, has led us to consider the possibility of using a portable machine for this purpose, as is constantly done in England and in Europe, and with entire satisfaction. We have considered the plan for such a machine submitted by McLauthlin & Co., of Boston (who built the three plants for the city of Boston), and have consulted with members of the State Board of Health, and feel that with such a portable machine, the weight of which will be about three tons, we shall be able to disinfect the greater proportion of such articles very nearly as effectually as with a stationary plant, and shall be able to begin the work, if the purchase of such a machine is authorized at once, at a much earlier date than would be possible if a stationary plant were erected. This last consideration we deem of great importance. The expense of such a machine would be between $1,300 and $1,400, exclusive of horses, two of which would be required, and their harnesses. A place for the storage of the machine and for stabling the horses can probably be furnished by one of the other departments of the city, at least until the erection of the Hospital for contagious diseases, which the city is to build under the provisions of Chap. 511, of acts of 1894. When this hospital is built, it will be well, for various reasons, that a shed for storage of the machine be furnished on the hospital

grounds. The expense of operation will be the salary of an engineer, to operate the machine, and the cost of fuel, oil, etc., which it will consume. We estimate the expense of the purchase as follows:—

Portable disinfecting machine	$1,400
Two horses at $250	500
Two harnesses at $75	150
Canvas suits, bags, etc., not over	75
	$2,125

OPERATING EXPENSES.

Salary of engineer at $60 per month	$720
Fuel, oil, etc., say $20 " "	240
Feed and care of horses ?	
per annum	$960

exclusive of care and feed of horses, which can probably be attended to by another department of the city.

We therefore ask that an appropriation be made of $2,125, for purchase of machine, horses, harnesses, suits, etc. (in case horses and harnesses can be supplied from those already owned by the city, this amount can be reduced by $650), and an additional appropriation of a sum equal to $80 per month, for balance of fiscal year, to cover operating expenses exclusive of care and feed of horses.

Whenever possible, a charge will be made for disinfecting by the machine, by which the net expense of operation may be materially reduced. As some five or six weeks may be required for the construction of such a machine, and as we deem it of the utmost importance that the machine be put in operation in this city at the earliest moment possible, we ask for immediate action in the matter.

Respectfully,

(Signed) E. E. SPENCER,

Chairman of the Board.

A true copy.

Attest, JAMES B. SOPER, *Clerk.*

At this time it appeared to the Board that the most economical way of disinfecting these articles would be by means of a portable steam disinfecting plant, which could be moved from house to house in the city and might be operated in the street. Such portable plants are in use upon the Continent, and one has been designed for United States Marine Hospital Service.

Upon further consideration of the matter, and conference with members of the city government and other citizens, it appeared that there might be objection to the operation of such a plant in the streets of the city, on the ground of the obstruction it might cause and the possible frightening of horses. The Board

thereupon applied to the Boston Board of Health for permission to have such disinfecting done at the Swett Street plant in Boston, the city of Cambridge undertaking the carriage of articles to and from this disinfecting plant, and paying the city of Boston a reasonable price for doing the actual work of disinfecting.

The Boston Board of Health graciously acceded to our request, and our recommendation was thereupon changed to provide for disinfecting these articles in this manner, pending the construction of a permanent plant in this city. The city government has already authorized the purchase of vans for the purpose of transporting these articles; the Board has advertised for proposal therefor, and as soon as they can be procured the Board hopes to enter upon the work of disinfecting properly and effectively articles which have been exposed to contagion.

But recognizing that the facilities so kindly placed at our disposal for this purpose by the health authorities of Boston are primarily for the use of the city of Boston, and that our use thereof must necessarily be subordinate to the needs of that city, we feel and recommend that the city of Cambridge should proceed at once to the erection of its own permanent plant for this purpose. As appears from our communication to the Mayor above referred to, there is no question in the minds of the medical authorities of the necessity for such disinfection.

School Children.

Up to June 1, 1894, children attending the public schools who had been affected with scarlet fever or diphtheria, or who had been withdrawn from school on account of the prevalence of these diseases in their households, were permitted to return to school on presenting the certificate of the attending physician that two weeks had elapsed from the death or recovery of the person affected.

This system was worse than unsatisfactory in its operation. A certificate was given in many cases before the time when it was safe for the child to return to school, and frequently while the child was in a condition most adapted for communicating the disease to others, especially to other pupils gathered

together for hours in rooms often too small to be occupied even by the same number of healthy individuals.

Recognizing these facts, the School Committee addressed a communication to the Board of Health, requesting the Board to "appoint a competent physician to examine all cases of contagious diseases in houses in which school children lived, to keep watch of the course of such cases, and to forward promptly to the Secretary of the School Board notice of the time at which children who have been sick or quarantined may return to school."

The School Committee and the Board of Health thereupon joined in requesting the city government to provide such additional funds as would enable this Board to comply with the request of the School Committee, which they felt to be most proper. We are happy to state that this provision was made, and that the Board of Health immediately appointed its Medical Inspector to undertake this additional work outlined above; and since June 1, 1894, no children are allowed to return to the public schools in these cases except after personal examination of the case by our Medical Inspector, and upon his certificate that, in his opinion, such return can safely be permitted.

To make this plan effective it was necessary to require the certificate of the Board of Health in every case, and a rule to that effect has been adopted by the School Committee.

Of the importance of this step, and of the protection thereby afforded to the children who attend the public schools, there can be no question. But in order to make the system perfect it should be made applicable to all who attend any school in this city, whether public, private, or parochial. The spread of scarlet fever among children attending private schools in this city, due undoubtedly to the return of other children at a time when they were capable of communicating this disease, affords the best evidence of this necessity.

Hospital.

On June 25, 1894, the Legislature passed an act (Chap. 511 of the Acts of 1894) providing that in any city in which no

suitable hospital accommodations have been provided for the care and treatment of persons suffering from contagious diseases dangerous to the public health, the Board of Health of such city might address a communication to the mayor thereof, setting forth that, in its opinion, the safety of the inhabitants demands that such accommodations should be provided; and that thereupon the mayor should transmit the communication to the City Council, and the City Council should forthwith order such accommodations to be provided and make the necessary appropriations therefor.

On July 21, 1894, the Board thereupon addressed the following communication to the Mayor: —

OFFICE OF BOARD OF HEALTH, CAMBRIDGE, July 21, 1894.

Hon. Wm. A. Bancroft, Mayor of Cambridge: —

DEAR SIR: At a regular meeting of the Board held the 20th inst., it was voted to communicate to you the following: "The present outbreak of cholera in St. Petersburg, the great danger that cases of the disease will in a few months reach our shores, and the danger, always present, that a case of contagious disease may occur in this city, which can only be treated in a separate hospital, make it our duty to call your attention to the imperative necessity of providing at once a hospital for contagious diseases.

This Board may be at any time compelled to seize and occupy a building in this city as such a hospital, which might entail upon the city a greater expense than would the erection of a proper building for such a hospital. We feel that this matter is one requiring immediate attention; and therefore as in this city no suitable hospital accommodations have been provided for the care and treatment of persons suffering from contagious diseases dangerous to the public health, this Board, acting under and by virtue of the authority upon it conferred by Chapter 511 of the Acts of 1894, states that, in its opinion, the safety of the inhabitants of this city demands that suitable hospital accommodations should be provided for the reception and treatment of persons suffering from such diseases other than smallpox and those of a venereal nature."

Respectfully for the Board of Health,

JAMES B. SOPER,

Clerk.

Beyond the consideration of the matter by last year's Committee on Health, at one of the meetings of which committee this Board was requested to attend, and did attend, the Board is not aware that anything has been done toward providing this hospital.

It has, however, been suggested to the Board that difficulty

was experienced in obtaining a suitable site for such hospital at a fair and reasonable price. If such is the case no time should be lost in applying to the Legislature for the authority to enable the city to take and condemn by right of eminent domain any land in this city for such hospital and its surroundings. As similar authority has already been granted the city of Boston (Acts of 1889, Chap. 336), there would seem to be no reason for refusing it to the city of Cambridge. As the Legislature has now imposed upon the city of Cambridge the duty of providing such hospital, it is not likely to deny it the means necessary to enable it to perform that duty.

We hope that application for this authority may be made at once, and that next fall may see the construction of such a building well under way. In order to save time we recommend that an appropriation of $300 be at once made and placed at the disposal of this Board, to enable it to prepare preliminary plans for such a hospital and estimates of the probable expense involved.

And in closing this Report, we wish to state our conviction that no attempts at controlling diseases dangerous to the public health will ever be really effectual, nor will the citizens of Cambridge ever be afforded the protection from such diseases to which they are entitled until the Board of Health has placed at its disposal ample hospital accommodation for the isolation of such cases as cannot be properly cared for at home, and until a plant for the disinfection of infected articles is provided, and means are supplied for carrying out bacteriological examinations in obscure cases of disease. We desire to impress upon you that these means have been found satisfactory after trial by those competent to judge. The subject is not merely an interesting theory, but a matter which affects the happiness, the health, and the life of each man, woman, and child in this city of 80,000 inhabitants.

A report on Vital Statistics by the Medical Inspector is appended.

E. EDWIN SPENCER, M. D.,
EDMUND M. PARKER,
CHARLES HARRIS,
} *Board of Health.*

SOME VITAL STATISTICS.

In the following remarks the term "morbidity" means the number of cases of a disease in proportion to the population, and is stated as the number of cases per thousand persons. Fatality, usually called case mortality, means the number of deaths in proportion to the number of cases, and is stated as a percentage. The term "death rate" has been substituted for mortality, owing to the ambiguity of the latter term; even the best authorities using the word "mortality" both as a synonym of death rate and as meaning the number of deaths. Undue importance should not be attached to the death rate, nor to the morbidity for the years 1891 to 1894 inclusive, as they are for this period calculated upon estimated populations, and will need revision on the receipt of the returns of the State Census of 1895. With this understanding they may be accepted for what they are worth, as approximations to the truth. As we can never know all the cases that occur, the morbidity figures are always a little too low, and the fatality figures a little too high. However, as this error runs through all the years, there is probably little harm in using these figures for the purpose of a rough comparison.

Death Rate per 1,000 Living from all Causes.

1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
20.55	17.89	18.96	19.64	19.17	17.05	18.99	19.27	19.72	18.36

The mean annual death rate for the ten years 1885 to 1894 inclusive was 18.96.

For the nine census years 1850 to 1890 inclusive, which give of course more accurate data, it was 19.80.

The death rates of different years in a long-settled community with established interests are comparable. A comparison of the death rate of one place with that of another place can answer no useful purpose unless we are sure that there is a fair amount of agreement between the age and sex distribution of the populations of the places sought to be compared, and also

between the occupations of their inhabitants and the numbers of the persons respectively engaged therein.

With a constantly increasing foreign-born element in the population whose ideas of cleanliness and of the importance of pure air are quite limited, and with the erection of more and more tenement houses, in the construction of which little or no regard is had to the supply of air and light, causes are at work detrimental to the public health.

Much good might be accomplished by a corps of women visitors who should visit systematically the poor and ignorant in their homes, and endeavor in simple language to impress upon their minds some of the fundamental principles of healthy living, such as the value of pure air, sunlight, cleanliness of person and surroundings, and other allied influences. Those who could suffer disappointment without being discouraged, and who could be content to accept as the result of their toil the satisfaction of feeling that they had made some impression, however slight, on the existing mass of dense ignorance, would be a valuable adjunct to any board of health.

The large number of deaths occurring annually among infants under one year of age is due not so much to insanitary conditions that can be remedied by public statutes and by regulations of boards of health, as it is to the ignorance of parents regarding the proper feeding and care of their children, and its remedy lies in a great measure in the instruction of parents in the rudiments of infant hygiene.

Scarlet Fever.

Morbidity per 1,000 Living.

1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
6.65	3.70	3.27	2.26	1.70	2.69	4.90	5.01	8.81	11.33

Fatality Percentage.

6.04	3.93	9.56	15.4	6.03	5.29	2.82	4.54	9.85	11.2

The mean annual morbidity for these ten years, 1885 to 1894 inclusive, was 5.03.

The morbidity has been steadily rising since 1889, reaching in the year which has just closed the highest recorded. The wave-like progression is clearly marked in the table given above. The mean annual fatality for the years 1885 to 1894 inclusive was 7.46.

There came to the knowledge of the Board during the year 901 cases, an increase of 221 over the number reported in 1893. Their distribution was as follows: Ward 1, cases 139, an increase of 56; Ward 2, cases 234, a decrease of 16; Ward 3, cases 181, a decrease of 14; Ward 4, cases 268, an increase of 157; Ward 5, cases 79, an increase of 38.

Of the whole increase, over 70 per cent. occurred in Ward 4.

Age and Sex Distribution.

Age.	Male.	Female.	Sex not given.	Total.
0–1	12	7	1	20
1–2	25	21	2	48
2–3	36	36	1	73
3–4	53	57	2	112
4–5	51	71	2	124
5–10	164	186	6	356
10–15	39	46	1	86
15–20	10	13	.....	23
20–25	10	8	1	19
25–35	5	8	.....	13
35–45	1	.....	.....	1
45–55	1	.....	.....	1
55–65	.....	.....	.....	.....
65–75	.....	.....	.....	.....
Over 75	.....	.....	.....	.....
Not given	10	14	1	25
Total	417	467	17	901

Of the cases given above, 90 per cent. occurred among persons under fifteen years of age.

Number of Cases Reported Weekly.

Week Ending	Cases.	Week Ending	Cases.
January 6	24	July 7	16
" 13	32	" 14	9
" 20	28	" 21	8
" 27	31	" 28	6
February 3	18	August 4	6
" 10	21	" 11	13
" 17	26	" 18	8
" 24	25	" 25	11
March 3	22	September 1	21
" 10	25	" 8	12
" 17	18	" 15	12
" 24	30	" 22	9
" 31	33	" 29	7
April 7	18	October 6	9
" 14	24	" 13	2
" 21	18	" 20	6
" 28	20	" 27	8
May 5	17	November 3	11
" 12	30	" 10	10
" 19	30	" 17	11
" 26	34	" 24	8
June 2	26	December 1	17
" 9	31	" 8	3
" 16	28	" 15	14
" 23	8	" 22	11
" 30	20	" 29	15

When so much is said and written about the influence of schools in spreading communicable diseases, let it be remembered that there are other causes at work equally if not more potent for evil. Little can be added to the forcible words of Clement Dukes on this subject: "In fact, were I asked to name the most likely spots in this country (England) for the starting of infectious diseases . . ., I should not name the market-place, the highway, the home, the laundry, the school, the church, the funeral, or the theatre, but the public conveyances." Who that has experienced the disgusting stenches, and seen the indecent crowding together of men and women in the street cars, can doubt the danger of contracting in them nearly every communicable disease to which flesh is heir!

Diphtheria.

There were reported during the year 176 cases, an increase of 73 from the previous year.

Their distribution was as follows: Ward 1, cases 24, an increase of 5; Ward 2, cases 43, an increase of 15; Ward 3, cases 31, an increase of 15; Ward 4, cases 30, an increase of 12; Ward 5, cases 48, an increase of 26.

Morbidity per 1,000 Living.

1885.	1886.	1887	1888.	1889.	1890.	1891.	1892.	1893.	1894.
3.53	3.80	3.16	3.36	5.16	2.24	1.59	1.74	1.33	2.20

Fatality Percentage.

29.8	31.9	19.3	26.5	29.3	20.3	13	37.8	36.8	31.8

The mean annual morbidity for the ten years, 1885 to 1894 inclusive, was 2.81.

The mean annual fatality for the ten years, 1885 to 1894 inclusive, was 27.6.

Although the morbidity has been below the mean since 1889, the fatality has for the past three years been very high.

Age and Sex Distribution.

Age.	Male.	Female.	Sex not Given.	Total.
0–1	3	1	.....	4
1–2	8	7	1	16
2–3	17	6	2	25
3–4	11	7	1	19
4–5	4	8	1	13
5–10	31	35	1	67
10–15	4	6	2	12
15–20	4	5	.....	9
20–25	4	1	.....	5
25–35	1	1	.....	2
35–45	.....	2	.....	2
45–55	.....	1	.....	1
55–65	.....	.....	.....	.....
65–75	.....	.....	.....	.....
Over 75	.....	.....	.....	.....
Not given	1	.....	.....	1
Total	88	80	8	176

Number of Cases Reported Weekly.

Week Ending	Cases.	Week Ending	Cases.
January 6	1	July 7	3
" 13	2	" 14	2
" 20	7	" 21	8
" 27	5	" 28	3
February 3	3	August 4	3
" 10	2	" 11	5
" 17	4	" 18	2
" 24	8	" 25	3
March 3	0	September 1	3
" 10	0	" 8	1
" 17	2	" 15	1
" 24	7	" 22	3
" 31	7	" 29	1
April 7	4	October 6	0
" 14	2	" 13	3
" 21	2	" 20	3
" 28	2	" 27	9
May 5	2	November 3	6
" 12	4	" 10	4
" 19	2	" 17	2
" 26	5	" 24	1
June 2	1	December 1	2
" 9	1	" 8	5
" 16	3	" 15	9
" 23	5	" 22	6
" 30	2	" 29	5

Accepting it as a fact that the so-called Klebs-Löffler bacillus is the specific cause of diphtheria, there remains much to be learned regarding the conditions, external to the body of its human host, which exert an influence over the life and activity of this organism in the way of inhibiting or of increasing its toxic power. With this end in view, we submit a brief resumé of the conditions found to exist at the places where cases of diphtheria occurred during the year. Plumbing defects were conspicuous by their absence, untrapped sinks being found in three places and a leaking waste pipe in one. In twenty-one instances the site of the building was damp. In eight cases there was a privy vault in the yard, and in two cases cesspools. In two places there was an open sewer about 300 feet from the houses. In nine instances the premises were noted as being dirty. At twenty-four places fowl were kept on the premises.

Typhoid Fever.

There were reported during the year 120 cases, an increase of 28 from the previous year.

Their distribution was as follows: Ward 1, cases 21, an increase of 3; Ward 2, cases 48, an increase of 7; Ward 3, cases 20, an increase of 8; Ward 4, cases 19, an increase of 2; Ward 5, cases 12, an increase of 8.

Morbidity per 1,000 Living.

1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
1.07	2.18	1.91	2.50	2.94	1.08	0.97	1.07	1.20	1.50

Fatality Percentage.

20.3	14.8	16.3	15.7	13.5	25.	22.8	18.7	17.3	17.5

The mean annual morbidity for the ten years 1885 to 1894 inclusive was 1.64.

The mean annual fatality for the ten years 1885 to 1894 inclusive was 18.1.

Age and Sex Distribution.

Age.	Male.	Female.	Sex not Given.	Total.
0–1				
1–2				
2–3	1	1		2
3–4				
4–5	1			1
5–10	6	3		9
10–15	1	3		4
15–20	10	5		15
20–25	18	12		30
25–35	20	12	3	35
35–45	8	6		14
45–55	1	2		3
55–65				
65–75	1			1
Over 75				
Not given	5	1		6
Total	72	45	3	120

In twenty-three cases the disease was contracted in some place outside of Cambridge, the person having come here already ill. In one instance the person had been in several places; in ten cases the disease was contracted in some place in Massachusetts: in one case in Ohio; in four cases in New Hampshire; in two instances in Maine; in one instance in Nova Scotia; in two instances in New York; in one instance in District of Columbia; in one instance in Louisiana. Eight cases occurred in rapid succession among persons taking milk from the same Somerville milkman, and were reported on the following dates: —

October 19, 19, 20, 23, 25, 27, November 9, 23. Through the courtesy of Dr. S. W. Abbott, Secretary of the State Board of Health, we are able to state that the trouble probably originated at a farm in Bedford, whence some of the milk came.

Typhus Fever.

The last experience Cambridge had with this disease was in the year 1882. It was brought in by an Irish emigrant who came over on one of the steamers of the Cunard Line. There were in all seven cases, one of them being that of the Assistant City Physician, Dr. O. C. Turner, who had charge of the cases, and who lost his life in the discharge of his duty. All the others recovered.

During the past year there have occurred four cases, all ending in recovery: —

Case 1. — Harry McDonald, cattleman, sailed from Liverpool on the steamer Bostonian, of the Leyland Line, July 7, and landed at Boston July 17. On the same day he went to his home, 106 Windsor Street, Cambridgeport. He is said to have been ill during the entire passage over. On July 19 he was removed to the Cambridge Hospital, where the course of the disease convinced the visiting physician that the case was one of typhus fever, and he notified the Board to that effect.

Case 2. — Norah Walsh, aged eleven years, sailed from Queenstown August 10, on the steamer Pavonia, of the Cunard Line, reaching Boston August 19. She went immediately with the rest of her family to 642 Cambridge Street, East Cambridge.

She is said to have been ill during the entire passage over. On August 24 she was removed to the Cambridge Hospital, where the course of the disease convinced the visiting physician that the case was one of typhus fever, and he notified the Board to that effect. On August 29 the Walsh family moved to 499 Windsor Street, Cambridgeport.

Case 3. — Katie Walsh, aged nine years, sister of the above, came over in same steamer at same time. She fell ill of the same disease, and was removed to the Cottage Hospital September 9.

Case 4. — Ellie Walsh, aged eight years, sister of Norah and Katie, came over in same steamer at same time. She fell ill of the same disease, and was removed to the Cottage Hospital September 14. The Walsh family consisted of father, mother, and nine children, ranging in age from six to twenty-one years. They were all scrupulously clean personally and with regard to their dwelling. The house where they lived was kept under constant supervision till, in the opinion of the Board, no danger existed of the occurrence of further cases. The great cleanliness observed by this family no doubt contributed largely to the prevention of the spread of the disease; for typhus fever is par excellence the disease of filth, overcrowding, and impure air. When such cases can slip through one of the best conducted quarantines in the country, it points the moral that we should be prepared for these exigencies, and not rely upon our neighbors for protection. Such preparation means the establishment of a hospital and its essential adjunct, a disinfecting plant.

Death Rate per 1,000 Living at all Ages.

	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.
Cancer	0.58	0.64	0.56	0.53	0.64	0.67	0.72	0.56	0.60	0.59
Diarrhœal Diseases	1.70	1.53	2.16	2.26	1.79	1.82	1.92	2.04	1.64	2.14
Measles	0.16	0.06	0.68	0.03	0.17	0.01	0.11	0.02	0.14	0.00
Phthisis	3.03	2.88	2.64	2.50	2.63	2.49	2.73	2.69	2.76	2.08
Whooping Cough	0.11	0.16	0.06	0.36	0.19	0.18	0.16	0.14	0.20	0.43

The mean annual death rate of cancer for the ten years, 1885 to 1894 inclusive, was 0.60 ; of diarrhœal diseases, 1.90 ; of measles, 0.13 ; of phthisis, 2.64 ; of whooping cough 0.19.

Judging from the death rate, whooping cough must have been very prevalent or very fatal during the year.

The death rate from phthisis was the lowest in the years recorded above.

As the Board now requires the notification of measles, we shall be able next year to give its morbidity and fatality. It does not appear to have been the primary cause of death in any case reported to the Board this year.

The death rate from diarrhœal diseases was high, having been exceeded but twice in the past decade. The excess in the number of deaths also continued later in the season than usual.

The death rate of cancer was practically identical with the mean annual death rate for 1885 to 1894 inclusive.

Influenza.

The following table gives the total deaths in the causation of which this disease was certified to have been a factor.

Sex.	Age.	Died.	Cause of Death.
Male	14 years	January 1....	Influenza.
Female.....	2½ "	" 1....	Influenza and tonsillitis.
Female.....	69 "	" 1....	Influenza, followed by œdema of lungs.
Female.....	70 "	" 2....	Influenza and general debility.
Female.....	74 "	" 5....	Influenza and general debility.
Male	89 "	" 9....	Disease of the heart with la grippe.
Female.....	82 "	" 19....	Fatty degeneration of the heart, influenza.
Female.....	82 "	" 23....	La grippe.
Male	79 "	" 29....	La grippe and bronchitis.
Male	46 "	" 31....	Influenza and œdema of the lungs.
Male	10 months	May 6.....	Influenza, followed by broncho-pneumonia.

Table of Deaths in 15 Age-Groups.

Diseases.	Under 1 Year.	1 to 2 Yrs.	2 to 3 Yrs.	3 to 4 Yrs.	4 to 5 Yrs.	Totals under 5 Years.	5 to 10 Yrs.	10 to 15 Yrs.	15 to 20 Yrs.	20 to 25 Yrs.	25 to 35 Yrs.	35 to 45 Yrs.	45 to 55 Yrs.	55 to 65 Yrs.	65 to 75 Yrs.	Over 75 Yrs.	Totals.
Accident	1		1			2	1	2	4	1	2	2	4	2	3	2	25
Anæmia, Pernicious									1			1	2				4
Cancer	1					1					1	5	10	13	12	5	47
Diabetes									1				2	2		1	6
Diarrhœal Diseases	126	23	3	1	1	154	4			2	2	1		3	3	2	171
Diphtheria and Croup	6	9	12	11	6	44	15	2									61
Erysipelas																1	1
Fever, Intermittent											1						1
" Scarlet	5	8	13	16	20	62	31	5	1	2							101
" Typhoid									1	4	10	6	1		1		23
Influenza	1		1			2		1					1		3	2	9
Phthisis	1	1	1	1		4	2	5	23	23	48	26	23	8	2	2	166
Puerperal Diseases										7	5						12
Purpura Hæmorrhagica									1			1					2
Rheumatism	1					1					1	1	1	2	1		7
Rheumatic Arthritis									1								1
Rickets	1					1											1
Scrofula	2	1	1			4				1							5
Septicæmia	1	1				2											3
Suicide										1	1			1			3
Syphilis											1		1				2
Whooping Cough	16	11	2	2	3	34	1										35
Diseases of Circulatory System	9	1				10	1	1	3	5	4	11	16	18	12	26	107
" " Digestive "	16	2	1		1	20	2	1	3	4	5	5	7	7	9	2	65
" " Nervous "	37	23	10	3	6	79	8	3	1		1	12	6	16	32	29	187
" " Respiratory "	41	20	6	1	2	70	3	4	3	5	5	14	10	17	14	31	176
" " Urinary "	1	1				2		2	4	3	6	3	8	5	8	6	47
All other causes	111	5	3	2	1	122	1			2	3	7	5	6	14	34	194
Total	377	106	54	37	40	614	69	26	47	60	96	95	97	100	115	143	1462

EDWIN FARNHAM, M.D.,
Medical Inspector.

OFFICE OF BOARD OF HEALTH, CITY HALL, December 31, 1894.

To the Honorable the City Council: —

This Board herewith respectfully submits it annual financial statement, it being for the year ending November 30, 1894: —

Amount appropriated for Health Department	$5,500 00	
Amount additionally appropriated	700 00	
		$6,200 00

AMOUNT EXPENDED.

Advertising	$68 75	
Architect's plan	30 00	
Atlas	15 00	
Blank books	19 62	
Burying animals	79 48	
Car tickets	225 00	
Carriage hire	4 00	
Chemicals and disinfectants	98 83	
Chart	7 00	
Copying	15 95	
Directory	3 00	
Document trunk	1 75	
Electric lamp and fixtures	7 46	
Indexing	3 20	
Index case and cards	29 75	
Ink and pad	4 38	
Inspector's badge	1 50	
Justice of Peace warrant	7 00	
Lanterns	1 30	
Office table	5 50	
Printing	303 04	
Serving notices	8 60	
Services of Clerk and Sanitary Inspectors	2,544 45	
Service of Medical Inspector	1,500 00	
Service of physician to Board	699 96	
Sign	3 09	
Stationery and postage	47 35	
Tin ware	1 38	
Vaccination	196 25	
Vaccinators	90	
Virus points	164 39	
Total expenditure		$6,097 88
Balance of appropriation unexpended		$102 12

By direction of the Board of Health,

JAMES B. SOPER,
Clerk.

APPENDIX.

Causes of Deaths Reported to Board of Health in 1894.

Deaths of Non-residents Omitted.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Abdominal disease	....	1	....	....	....	....	....	....	....	....	....	....	1
Abscess	....	....	....	....	2	....	....	...	1	....	....	....	3
Accident	4	1	....	....	....	2	3	3	3	4	2	3	25
Alcoholism	....	1	....	....	....	....	....	....	....	....	....	....	1
Aneurism	....	1	....	....	....	....	....	....	....	....	....	....	1
Angina pectoris	....	....	....	....	....	....	1	...	....	....	....	....	1
Anæmia, Pernicious	....	....	....	1	1	....	....	1	....	1	....	....	4
Apoplexy	7	2	4	2	3	3	4	2	5	1	7	5	45
Apoplexy, Pulmonary	....	....	....	....	....	....	....	1	....	....	....	....	1
Appendicitis	....	....	....	..	....	1	....	1	....	...	....	....	2
Appendix disease	....	....	....	....	2	....	....	....	....	....	....	....	2
Arthritis	....	....	....	....	1	....	....	....	....	....	....	....	1
Asphyxia	....	2	1	....	....	....	....	....	....	....	....	....	3
Asthma	....	....	....	1	....	....	....	....	....	....	1	....	2
Atheroma	....	....	1	....	....	....	....	....	....	....	....	....	1
Atrophy	1	..	....	....	..	....	....	....	....	....	....	....	1
Biliary obstruction	....	....	....	...	1	....	....	....	...	....	....	....	1
Brain congestion	....	....	....	....	....	....	2	....	....	....	....	....	2
Brain disease	2	....	....	1	3	....	....	....	....	....	....	1	7
Bronchitis	7	6	6	8	1	7	4	2	3	3	5	3	55
Cancer	1	5	3	5	5	5	9	5	....	2	5	2	47
Carbuncle	1	....	....	....	....	....	....	....	....	....	....	....	1
Caries of spine	....	1	....	....	....	....	....	....	....	....	....	....	1
Cirrhosis of liver	....	2	....	....	....	....	....	....	1	...	1	....	4
Convulsions	1	1	3	1	5	2	....	1	4	2	1	3	24
Croup, Membranous	....	1	....	....	1	1	....	....	1	....	1	....	5
Cyanosis	....	....	1	....	....	....	....	...	....	....	....	....	1

Causes of Death in 1894.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Cystitis	....	....	....	....	....	....	....	2	....	....	....	....	2
Debility	1	1	....	1	2	2	3	2	1	4	1	1	19
Delirium tremens	....	....	....	...	....	....	1	....	....	....	.. .	....	1
Dementia	...	....	....	....	....	....	....	1	....	....	....	3	4
Dentition	....	....	....	....	....	....	....	1	....	....	....	....	1
Diabetes	2	....	1	....	2	....	....	....	....	1	....	....	6
Diarrhœal diseases	....	5	4	4	1	9	59	36	20	26	5	2	171
Difficult labor	1	....	....	....	....	....	....	....	....	....	...	....	1
Diphtheria	7	5	3	3	3	2	6	6	1	7	4	9	56
Dropsy	....	....	....	....	...	....	1	....	....	....	1	....	2
Embolism, Cerebral	....	....	1	....	1	....	....	....	....	....	....	....	2
Empyema	....	....	....	....	1	....	....	....	....	....	....	....	1
Encephalitis	....	....	...	....	....	....	....	1	....	....	....	....	1
Endarteritis	1	....	....	....	....	....	....	...	....	....	....	....	1
Enteritis	1	....	....	....	....	....	....	....	1	....	....	....	2
Epilepsy	....	1	....	....	....	....	...	....	....	....	....	....	1
Erysipelas	...	....	....	....	....	....	....	1	....	....	....	....	1
Exhaustion	....	....	....	....	....	....	1	....	1	....	....	....	2
Extravasation of urine	....	...	1	....	....	....	....	....	....	....	....	....	1
Fever, Intermittent	....	...	....	....	....	....	....	....	....	1	....	....	1
Fever, Scarlet	14	15	5	9	13	21	7	4	4	3	4	2	101
Fever, Typhoid	....	1	....	2	1	....	....	2	6	7	4	....	23
Gallstones	1	....	....	1	....	....	....	....	....	....	....	....	2
Gangrene of mouth	....	1	....	....	....	....	....	....	....	....	....	....	1
Gangrene	...	....	1	....	....	....	....	....	....	....	....	....	1
Gastric ulcer	....	1	....	....	....	....	....	....	....	....	....	....	1
Gastritis	....	....	2	....	1	1	1	2	3	2	....	....	12
General paralysis	....	....	....	....	....	....	....	1	....	....	....	....	1
General tuberculosis	....	....	....	....	....	....	...	....	....	3	....	1	4
Hæmatemesis	...	1	....	....	....	...	....	....	....	....	....	....	1
Heart diseases	6	10	9	14	9	4	8	8	10	6	11	5	100
Heart failure	1	3	1	1	1	....	....	1	....	....	1	....	9
Hemorrhage of lungs	....	1	...	....	....	1	....	1	....	....	...	....	3
Hepatitis	....	....	....	....	....	....	....	....	....	1	....	....	1

Causes of Death in 1894.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Hernia	....	1	....	....	....	....	....	1	....	....	....	....	2
Hydrocephalus	....	....	....	....	...	....	....	1	....	....	....	....	1
Imperfect development	....	....	....	....	....	....	....	....	....	....	...	1	1
Inanition	2	2	1	....	2	2	1	....	2	6	....	3	21
Indigestion	....	...	....	....	1	1	1	....	....	....	...	1	4
Influenza	8	....	....	....	1	....	....	....	....	...	....	....	9
Injury during birth	....	....	....	....	....	....	1	....	....	....	....	....	1
Internal hemorrhage	....	1	....	....	....	....	1	...	....	....	....	....	2
Intestinal hemorrhage	....	....	1	....	....	....	....	....	....	....	....	....	1
Intestinal obstruction	....	1	....	....	1	....	3	....	....	....	....	....	5
Intestinal perforation	....	..	....	....	1	....	....	....	....	....	....	....	1
Intestinal stricture	....	....	1	....	....	....	...	....	....	....	....	....	1
Intestinal tuberculosis	....	....	....	....	1	....	....	....	....	....	....	....	1
Intestinal ulceration	...	....	1	....	....	....	....	....	....	....	....	...	1
Jaundice	....	...	....	....	....	....	....	....	....	1	....	1	2
Kidney disease	2	....	....	1	....	....	....	....	1	....	....	....	4
Laryngitis	1	...	....	....	....	....	....	....	....	....	....	....	1
Liver diseases	....	....	....	....	....	1	....	....	....	....	1	....	2
Locomotor ataxia	1	....	....	....	....	....	....	....	1	....	....	....	2
Lung disease	1	....	....	....	....	....	....	....	1	....	1	....	3
Malarial consumption	....	....	....	....	....	1	....	....	....	....	....	....	1
Marasmus	....	2	2	2	2	3	5	3	7	6	2	4	38
Meningitis	6	8	7	8	5	3	8	6	8	4	1	2	66
Murder	....	....	....	....	1	....	....	....	....	....	....	...	1
Nephritis	3	5	1	4	5	2	1	3	4	7	2	1	38
Neurasthenia	....	....	....	....	1	....	....	....	....	....	....	....	1
Neuritis	....	....	1	....	....	....	....	....	....	....	....	....	1
Old age	2	....	3	2	2	....	4	3	2	2	1	1	22
Paralysis	3	3	1	....	....	2	2	4	3	2	1	....	21
Peritonitis	1	2	....	....	1	2	....	1	....	2	1	....	10
Phthisis	13	11	17	10	12	17	13	21	7	17	15	13	166
Pleurisy	....	....	1	1	....	....	....	....	1	....	....	....	3
Pneumonia	25	18	16	6	3	6	1	1	6	7	6	10	105
Precipitate labor	1	....	....	....	....	....	. .	....	....	....	....	....	1

Causes of Death in 1894.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Premature birth	3	2	2	1	3	4	4	2	3	1	1	....	26
Prenatal change	...	....	....	....	....	....	...	....	....	....	...	1	1
Prolonged labor	....	....	...	...	...	....	1	....	...	....	....	....	1
Pulmonary congestion	....	...	...	....	....	....	....	....	....	2	...	....	2
Puerperal diseases	1	3	3	1	....	1	1	....	2	....	....	....	12
Purpura hemorrhagica	....	....	1	....	1	....	....	....	....	....	....	....	2
Rheumatism	....	...	..	1	....	2	....	....	....	1	1	2	7
Rheumatic arthritis	....	....	....	....	...	.. .	...	1	....	....	....	....	1
Rickets	....	....	....	...	....	....	....	1	....	....	....	....	1
Sciatica	....	1	....	....	....	....	....	....	....	1	....	....	2
Scrofula	...	....	1	....	....	1	....	....	....	2	...	1	5
Septicæmia	....	....	....	....	....	....	..	.	2	....	1	....	3
Softening of brain	....	...	1	....	....	2	1	....	....	....	....	....	4
Spleen disease	....	1	..	....	....	....	....	....	....	....	....	....	1
Stomach trouble	....	....	....	....	....	...	....	....	....	....	1	....	1
Suicide	....	....	....		...	1	....	...	....	....	2	....	3
Surgical operation	....	...	....	....	....	1	....	....	....	...	....	....	1
Syphilis	....	...	....	....	....	....	....	....	....	....	....	2	2
Tabes mesenterica	....	....	....	....	....	....	....	....	....	1	....	....	1
Tetanus	....	....	....	...		....	....	....	....	....	....	1	1
Tonsillitis	....	....	....	....	...	1	....	...	....	....	....	....	1
Tuberculosis	1	....	....	....	....	1	1	....	....	....	...	1	4
Tuberculosis, Cerebral	....	...	....	....	....	1	....	....	....	....	....	....	1
Tumor of abdomen	....	....	....	1	....	....	....	....	....	....	....	1	2
Tumor of brain	....	....	....	...	....	....	...	1	....	...	...	....	1
Ulcer	....	..	....	....	....	....	....	....	....	....	....	1	1
Unknown	4	2	1	1	1	2	1	2	3	1	....	2	20
Uræmia	...	....	....	...	1	....	...	....	....	....	....	....	1
Uretheral stricture	....	....	....	....	1	....	....	...	....	....	....	....	1
Vomiting and diarrhœa	....	....	..	....	....	....	....	1	..	....	....	....	1
Whooping cough	....	....	6	3	4	2	6	8	3	2	....	1	35
Total	137	132	115	96	110	120	166	145	121	139	91	90	1462
Stillbirths	9	6	11	5	0	4	14	6	8	8	7	9	87

Cases of Typhoid Fever, Scarlet Fever, and Diphtheria Reported to the Board of Health during the Year 1894.

	Ward.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Typhoid Fever.	1	1	0	1	1	0	0	0	1	1	9	6	1	21
	2	0	1	0	2	0	1	1	7	9	17	9	1	48
	3	0	0	0	0	0	0	2	0	10	5	1	2	20
	4	1	0	1	0	1	0	0	3	5	5	3	0	19
	5	0	0	2	0	0	0	0	0	0	5	3	2	12
Total		2	1	4	3	1	1	3	11	25	41	22	6	120
Scarlet Fever.	1	15	10	11	14	26	12	9	16	9	1	10	6	139
	2	36	26	20	23	36	35	14	11	7	7	7	12	234
	3	35	30	18	14	14	12	4	12	12	10	10	10	181
	4	26	17	50	25	49	30	15	16	11	9	10	10	268
	5	12	15	13	5	6	3	1	0	1	5	11	7	79
Total		124	98	112	81	131	92	43	55	40	32	48	45	901
Diphtheria.	1	4	1	2	1	3	0	5	2	0	3	1	2	24
	2	5	3	2	0	5	4	1	3	4	3	3	10	43
	3	3	2	5	0	0	0	1	1	2	5	6	6	31
	4	2	4	6	0	1	0	0	4	0	7	1	5	30
	5	3	5	1	9	4	8	10	4	1	0	1	2	48
Total		17	15	16	10	13	12	17	14	7	18	12	25	176
Grand Total		143	114	132	94	145	105	63	80	72	91	82	76	1,197

REPORT OF THE SUPERINTENDENT OF LAMPS.

OFFICE OF SUPERINTENDENT OF LAMPS,
CAMBRIDGE, December 1, 1894.

To the Honorable the City Council: —

I have the honor to herewith submit the annual report of the Lamp Department for the year ending November 30, 1894.

The amount appropriated	$69,000 00
Balance unexpended	11 19

The principal amounts expended are as follows: —

For arc lighting	$51,210 95
Incandescent	5,733 79
Gas consumed	6.460 74
Care of lamps	3,668 00
Chimneys	56 75
Oil	110 26
Matches	5 20
Carriage hire	38 00

Expenses for electric lighting have been as follows: —

Arcs.

Amount of bills rendered	$51,408 23
Amount of deduction for outages	197 28
Amount expended for arcs	$51,210 95

Incandescents.

Amount of bills rendered	$5,769 49
Amount of deduction for outages	35 70
Amount expended for incandescents	$5,733 79

The number of hours in which one or more lamps have failed to burn are: —

	Hours
For arc lamps	4,932
For incandescents	3,570
Total outages	8,502
The largest number of arc lamps in use in any one day	447
The largest number of incandescent in use in any one day	204

The expense of gas lighting has been as follows: —

Amount expended for gas	$6,460 74
Amount expended for care of lamps	3,346 16
Cost of gas per lamp	21 39
Cost of care per lamp	11 08
Cost of care per day	.03+

Average number of gas lamps burned per day during the year, 300. These lamps have burned 1,076,131⅜ hours, consuming 5,380,656¾ cubic feet of gas.

The average length of time each gas and oil lamp has burned per day, 8.96+ hours.

The expense of lighting with oil has been as follows: —

Amount expended for oil	$110 26
Amount expended for chimneys	56 75
Amount expended for matches	5 20
Amount expended for care of lamps	321 84
Cost of chimneys per lamp	1 95
Cost of care per lamp	11 08

Average number of oil lamps burned per day during the year, 29. Sixteen hundred and forty-five gallons of oil have been consumed, averaging 56 gallons per lamp, at an average of 6 cents per gallon.

Whole number of lamps in use November 30, 1894: —

Arcs	447
Incandescents	204
Gas	302
Oil	29
Total	982

The Committee on Street Lighting have carefully studied the various locations where lamps have been petitioned for, and in the opinion of the Superintendent have used exceedingly good judgment in deciding the necessities of the various petitions; they, as well as the Superintendent, have been disappointed that the Electric Light Company have not found it convenient to use more diligence in installing lamps after they have been requested so to do by the City Council, several months having elapsed, in many cases, before the new lights were lighted.

There are at present several lamps yet to be placed, the expense of which must come entirely out of next year's appropriation.

Gas Lamps.

The contract for gas for our street lamps expired November 15, and a Sub-Committee, consisting of Alderman Bleiler and the Superintendent, was appointed to consider the question of making a contract for an additional year.

Our lamps now burn five (5) feet of gas per hour, at a cost of $1.20 per one thousand feet.

Arrangements have been made with the Gas Company to continue furnishing gas at the same rate as under the old contract until the new Welchbach burner can be tried upon two street lamps; this burner consumes not over three (3) feet of gas per hour, and gives several times as much light as the burner used at present. In a short time the lamps located on Ware Street will be equipped with the new burner, and their trial will be watched with a great deal of interest by this department.

The question of substituting incandescent lights for the gas lamps is also receiving the attention of the Committee, which will report after trying the experiment with the Welchbach burner.

During the coming year several lamps must be added; for although we have a well-lighted city, many dark spots remain, and new streets are being constructed yearly which must be provided for as occasion requires.

Oil Lamps.

The city still has a few oil lamps in use, but the number is yearly growing less; the only thing I can say in their favor is that they are cheap.

To the Chairman of the Committee, as well as to the whole Committee, I extend my thanks for the conscientious manner in which they have decided each question presented to them.

Respectfully submitted,

CHAS. H. MORSE,

Superintendent of Lamps.

REPORT OF THE INSPECTOR OF WIRES.

CAMBRIDGE, December 1, 1894.

To the Honorable, the City Council: —

I have the honor to herewith submit the annual report of the department for the Inspection of Wires for the year ending November 30, 1894.

Each year the work of this department increases, as would be expected with the rapid improvements in electrical construction.

Mt. Auburn Street has been equipped with electric cars, which necessitated changing the telephone and electric light poles to stronger poles, that they might carry the span wires of the trolley system, thus saving two extra sets of iron poles. This method is quite satisfactory to each of the interested companies. The same method is now being carried out on Broadway.

Huron Avenue, Concord Avenue, and Garden Street have also been provided with electric cars.

The Cambridge Electric Light Company has been granted such locations for poles as in the opinion of the Inspector of Wires was necessary to reach would-be customers. After numerous hearings upon the question of poles on Harvard Street between Quincy and Harvard Squares, the wooden poles were removed and the wires of the Electric Light Company and the city wires carried through Mt. Auburn and Brattle Streets. This change is very much appreciated by the property owners upon the street, and is an illustration of the improvement which may be expected when our streets are provided with conduits.

During the last session of the Legislature this department was directed to assist the City Solicitor in urging the passage of a law which would give the city the right to construct and

lease conduits for electric wires. Hearings before the Committee on Mercantile Affairs were attended, and through the able efforts of our senator and representatives the Committee reported a bill which was quite satisfactory, but it was defeated in the House by a few votes.

One of the Inspectors of this department and a representative of the insurance interests have made a thorough inspection of all the wiring in the city in both public and private buildings, and it can be safely said that when the changes ordered are carried out, the fire risks from these wires will be reduced to a minimum.

Fire Alarm Telegraph.

The fire alarm system has with constant attention given excellent service. There are, however, in an automatic system serious drawbacks, one of which is that when a box is striking no other box can be pulled until the first has completed its work; and as some of the boxes require four minutes to strike out, the delay might result in great loss should two fires break out in different parts of the city at the same time. To overcome this defect we are, during such time as can be spared from other work, changing the system so that several boxes can be pulled at the same time, and each be correctly received at the office.

The boxes are also being arranged so that the Fire Department can telephone from them to the office; this will be of great advantage in calling for extra hose or apparatus.

Motor generators are being experimented with, which will, we hope, prove satisfactory in supplying current for our fire alarm system; if successful we can save five hundred cells of battery, which are not only uncleanly but expensive.

Sufficient apparatus should be purchased and stored in some convenient place, so that we could in a few hours equip our fire alarm office in case of a fire in the Brattle Square building; an expenditure of $800 would save several days' time in repairs in case of such an accident.

Police Signal Systems.

The three systems now in use in this city are each doing excellent work. Several hundred thousand calls are sent in from the sixty boxes each year, and the percentage of errors is very small; any defect which would interfere with the correct registering of a call is immediately corrected, during either night or day.

Arrangements have been made with the American Bell Telephone Company to exchange the telephone now in use for long distance sets; this will greatly improve the systems, as then no battery will be required at the box, the main battery answering for all purposes. This change can be made with no additional expense other than a few dollars for switches.

An extra register should be purchased, to be used when the regular ones are being cleaned, which is necessary several times each year.

Thanking His Honor the Mayor and the City Council for the uniformly generous treatment which this department has received at their hands, I respectfully submit this report.

CHARLES H. MORSE,
Inspector of Wires.

REPORT OF THE SEALER OF WEIGHTS AND MEASURES.

OFFICE OF SEALER OF WEIGHTS AND MEASURES,
CAMBRIDGE, November 30, 1894.

To the Honorable the City Council: —

I have the honor of submitting to you the annual report of the Department of Weights and Measures.

The net amount of appropriation	$1,000 00
Estimated revenue	600 00
Total appropriation	1,600 00
Amount expended	1,598 95
Balance unexpended	$1 05

Whole number of scales, weights, and measures inspected	38,750
Whole number of scales, weights, and measures condemned	1,368
Whole number sealed	37,382

Number of scales found incorrect and adjusted	328
Number of weights found incorrect and adjusted	110
Number of dry measures found incorrect and adjusted	41
Number of wet measures found incorrect and adjusted	11
Total	490

Number of scales condemned	15
Number of weights condemned	30
Number of dry measures condemned	45
Number of wet measures condemned	17
Number of milk cans and bottles condemned	1,261
Whole number condemned	1,368

The receipts of this department	$502 43

For expenses of this department, see Auditor's Report.

I desire to call your attention to the need of some assistanc in one branch of the work connected with this department.

The increase in the number of hawkers and pedlers ove that of last year is such as to render it impossible for the Seale to properly attend to this important item of the duties he i called upon to perform.

I have had letters from several of our citizens, complainin of those who are unscrupulous in the use of illegal measure and against whom I have been obliged to proceed.

I would suggest and recommend, as a better protection t our citizens against the fraud practised by these unscrupulou hawkers and pedlers, that an ordinance be passed requiring al hawkers and pedlers who desire to do business on our streets to procure licenses from the city, and that they be obliged t wear their license numbers in full view of every one, and i violation of such an ordinance that they be arrested and fine in such an amount as may be specified.

The business of this department is increasing with the rapi growth of the city, which requires the constant attention of th Sealer and his assistant. I am

Yours very respectfully,

A. F. ROBERTS,

Sealer

REPORT OF THE INSPECTOR OF MILK.

CAMBRIDGE, December 1, 1894.

To the Honorable the Mayor and City Council of the City of Cambridge : —

GENTLEMEN: I have the honor to submit the following report of the work of the department for the Inspection of Milk and Vinegar, for the year ending November 30, 1894.

The object of the work of this department is to secure the sale of pure milk, vinegar, and butter, these articles of food being especially liable to adulteration, and the first being of such extreme importance to children and the sick, that its sale in a pure form is absolutely necessary, in many cases to preserve their lives. Cases of sickness can be frequently traced to the use of impure milk, and in the summer much of the sickness and death among children is caused directly by the milk, which necessarily constitutes the whole or a large part of their food. Doubtless much of their sickness is due to the improper manner in which milk is cared for after its purchase by the consumer, but it is certainly absolutely necessary that it should reach the consumer in as pure a form as possible.

At the time the law in regard to vinegar was passed, it was the custom among certain dealers to adulterate vinegar with some one of the mineral acids ; but this practice seems now to to have been abandoned, and the present custom is to sell vinegar manufactured from refuse starch and some other substances, and subsequently colored to look like cider vinegar, for cider vinegar. This custom is rather a fraud than a practice injurious to the health of the consumers, and as such is considered by the Inspector of much less consequence than the purity of the milk supply. The same thing may be said of the sale of oleomargarine for butter; these two substances are probably of nearly equal value as articles of food, oleomargarine, however, can be sold for from ten to fifteen cents a pound cheaper

than butter, and when fraudulently sold for it is an attack upon the consumer's pocket rather than upon his health, and must, therefore, always be of secondary importance. Within the last two years the inspection of the ice supply has also been made part of the duty of this department. In the Inspector's opinion this ranks next in importance to the inspection of milk, but without some further legislation, nothing can be done by him to prevent the sale of impure ice, no matter of how bad quality it may be. Some state legislation in regard to ice, similar to that now in force regulating the sale of milk, is urgently needed. Much of the ice now cut in the neighborhood of large towns is taken from ponds and streams polluted by sewage, and must be considered entirely unfit for domestic use. It is by no means improbable that some of the obscure cases of sickness or death may be directly due to the use of ice cut from such sources. This work, as outlined above, has been carried on in the same manner as described in previous reports, and no change has been made in the methods of analysis of the collected samples, descriptions of which may be found in the report for 1890 and 1893. Samples of milk, vinegar, and butter are collected from stores and teams and brought to the office in the City Hall, where they are examined, and analyzed when any doubt exists as to their purity. A complaint is then made in those cases where the samples are found to be below the legal requirements, either by means of warnings, or by taking the cases into court. These warnings read as follows: —

CITY OF CAMBRIDGE.

OFFICE OF INSPECTOR OF MILK.

CITY HALL, CAMBRIDGE, ... 189

You are hereby notified that a sample of ..... recently obtained from you was found on analysis to be of poorer quality than is required by the statutes. You are respectfully warned that the sale of such, or the possession or custody of the same with intent to sell, renders you liable to the penalties provided in the Public Statutes. Further information will be furnished you on personal application at this office.

Respectfully yours,

OFFICE HOURS.

MONDAY, WEDNESDAY, AND FRIDAY, ...

From 9.30 to 10.30 A M. *Inspector.*

It is not the intention of the Inspector to make any rule as to sending a warning to a dealer previous to taking a case into court, or as to the number of warnings sent to any particular person. In cases of gross adulteration a complaint is made without any previous warning; in other cases where it seems probable the dealer is really trying to sell pure goods, a number of warnings are sent, and an attempt is made to secure samples from the party supplying him before making a complaint. In fact, the intention is to treat each case on its own merits, and to secure the punishment of the parties morally guilty. Samples are collected three or four times a week, but on no particular days and at no particular hour, so as to make it as difficult as possible for dealers to have their goods arranged for inspection at certain times when the Inspector is thought to be taking samples; and of course the real efficiency of this department depends not only on the number of samples taken, but on the manner in which they are taken. A dealer can doubtless always supply pure goods when he so desires; the samples are therefore selected not upon his recommendation, but after looking over the whole supply and then picking out one or two samples for analysis.

Licenses have been issued this year the same as before, and to about the same number. In the case of milk teams and dealers in oleomargarine, whether carried on teams or sold from stores, an annual license is required; in the case of milk sold from stores, one license is good so long as business is done in the same place and under the same name; no license can be altered or transferred after its issue; no license is required to sell vinegar. All persons who sell milk or oleomargarine from teams are required to have their names, residences, and license numbers plainly marked on each side of their wagons, and in the case of teams selling oleomargarine, to have in addition the words "Licensed to sell oleomargarine." This latter provision is very generally evaded by painting these words in letters of so nearly the same shade as that used to paint the body of the wagon, that the lettering can only be seen on close inspection. All stores or restaurants in which oleomargarine is sold or used are obliged to display a placard bearing the words "Licensed

to sell oleomargarine," or "Oleomargarine used here"; these placards are generally so inconspicuously placed that they mostly escape notice.

The following table will show the number of licenses issued, the number of samples collected and analyzed, and the number of warnings sent and complaints made during the year: —

Number of annual milk licenses	170
Number of store milk licenses	96
Number of oleomargarine licenses	14
Sum realized from the sale of licenses	$140 00
Total number of samples collected	2,291
Total number of samples of milk collected	1,974
Total number of samples of vinegar collected	113
Total number of samples of butter collected	204
Total number of samples of milk of standard quality collected	1,576
Total number of samples of vinegar of standard quality collected	104
Total number of samples of butter of standard quality collected	199
Total number of samples of milk below the standard collected	388
Total number of samples of vinegar below the standard collected	9
Total number of samples of oleomargarine illegally sold collected	5
Total number of warnings sent for poor milk	200
Total number of warnings sent for poor vinegar	8
Total number of warnings sent for oleomargarine	3
Total number of prosecutions for sale of poor milk	9
Total number of prosecutions for sale of poor vinegar	1
Total number of prosecutions for sale of oleomargarine	2
Total number of prosecutions	11
Amount of fines imposed	$461 00

Samples of ice intended for domestic use were collected and analyzed as required, the method used being the same as that described last year; but owing to the lack of appropriation the Inspector was unable to make the investigation called for in regard to the sources of supply, except in the case of ice cut close by. Copies of these analyses were sent to the Board of Health and to the City Clerk, which latter is open to public inspection. At the time the analyses were made the companies were using ice derived from less objectionable sources than those from which some of the samples analyzed last year were taken; therefore none of the analyses made this year show such dirty ice as was indicated by some of those made last year. Several of them, however, show that the source of supply would not be considered suitable for a water supply, and therefore

cannot be recommended as places from which to cut ice intended for domestic use. The names of the companies doing business in this city, and the sources from which they derive their ice supply, as stated by them, together with the analyses made, are as follows : —

The Fresh Pond Ice Co. cuts at Brookline, N. H.

The Independent Ice Co. cuts at Wolfboro Junction, N. H., and at Mirror Lake, Hudson, Mass.

The Cambridge Ice Co. cuts at Spy Pond, Arlington. Little Fresh Pond, in North Cambridge, was not given as a source of supply this year.

The Standard Ice Co. cuts at Wenham Lake, in Beverly.

The Durgin Ice Co. cuts at Smith Pond, in Belmont.

The Boston Ice Co. cuts at Woburn, Wakefield, South Weymouth, and North Chelmsford, Mass., and at Milton, N. H.

The Drivers' Union Ice Co. cuts at Wenham Lake, in Beverly, Chebacco Lake, in Essex, Waushakum Lake, in South Framingham, and at Lovell's Pond and Powwow River, in New Hampshire.

The Harvard Ice Co. buys its supply from the Fresh Pond Ice Co.

Ice Analyses.

	Sediment.	Parts per 100,000.			
		Total Solids.	Chlorine.	Free Ammonia.	Albuminoid Ammonia.
Sample from Boston Ice Co., cut at Wakefield, Mass.....	Slight.	4.20	0.54	0.000	0.021
Sample from Cambridge Ice Co., cut at Spy Pond, Arlington	Slight.	4.20	0.42	0.000	0.014
Sample from Standard Ice Co., cut at Wenham Lake	Slight.	3.00	0.80	0.000	0.020
Sample from Drivers' Union Ice Co., cut at Essex, Mass.	Very slight.	1.30	0.50	0.000	0.012
Sample from Fresh Pond Ice Co., cut at Brookline, N. H.	Very slight.	1.30	0.54	0.000	0.002
Sample from Harvard Ice Co., cut at Brookline, N. H.	Very slight.	5.40	0.54	0.000	0.004
Sample from Independent Ice Co., cut at Wolfborough Junct., N. H.	Very slight.	5.40	0.50	0.000	0.003
Sample from Durgin Ice Co., cut at Smith Pond, Belmont.....	Slight.	3.00	0.54	0.001	0.012

The annual appropriation, with the way it has been expended, is shown in the following table : —

Salaries	$1,100 00
Paid collector for extra time	101 30
Paid for samples	30 51
Paid for horse hire	34 50
Car tickets	30 00
Record books	12 00
Tags, etc.	15 50
Stationery, etc.	15 00
Chemicals and incidentals	11 19
	$1,350 00

Respectfully submitted,

F. A. DUNBAR,

Inspector of Milk.

REPORT OF THE INSPECTOR OF ANIMALS AND PROVISIONS.

To the Honorable, the City Council: —

GENTLEMEN: In accordance with the requirements of the ordinance in relation to the inspection of animals intended for slaughter, or kept for the production of milk, I beg leave to submit the following report for the financial year ending November 30, 1894: —

Apropriation		$800 00
EXPENDED.		
Salary	$700 00	
Drugs, etc.	56 10	
		756 10
Balance		$43 90

In compliance with an order from the Cattle Commissioners of the State, I have inspected cattle, as required by them, twice this year; viz., in October and November, after they are taken up from the pasture, and in May before turning out to pasture. Acting under the printed instructions issued by the Commissioners, I have inspected 598 animals, consisting of milch cows, dry cows, bulls, and calves, and have found them all free from any contagious diseases. The inspection was a physical one, the tuberculine test not being allowed to be used by the Inspector of Provisions; but during the coming spring a thorough examination, with the test, will be made under the supervision of the Cattle Commissioners, when, undoubtedly, many cases of tuberculosis will be found.

The inspection of horses does not make so favorable a showing, 19 having been killed as being affected with farcy or glanders.

During the latter part of this year unusual care has been taken in keeping clean the watering-places in the city, and in my opinion this has had the effect of decreasing the disease during that period.

Under the Act of June 30, 1894, requiring all slaughtering establishments to be licensed and inspected, I have inspected the only two which exist in the city. At one 436 calves were slaughtered, of which 31 were condemned as too young, and at the other 16 beeves were slaughtered.

The horses owned by the city have been free from any enzootic, and are in a healthy condition. I have made 298 visits at the various departments of the city having horses under their charge, and have examined fifteen horses for soundness.

Respectfully submitted,

CHARLES E. HADCOCK, M. D. V.,

Inspector of Provisions, etc.

REPORT OF THE SCHOOL COMMITTEE FOR 1894.

In compliance with Section 142 of the Rules and Regulations, the Superintendent herewith submits his twentieth annual report, it being for the year ending December 31, 1894.

Population of Cambridge.

1840	8,409	1870	39,634
1850	15,215	1875	47,838
1855	20,473	1880	52,699
1860	26,060	1885	59,658
1865	29,112	1890	70,028

Estimated population, 1894, 84,000.

School Census.

Number of children in the city on the first of May, five years old or more but less than fifteen, as reported by the Truant Officers.

1876	8,218	1886	11,131
1878	8,422	1887	11,216
1879	8,885	1888	11,727
1880	9,390	1889	11,750
1881	9,582	1890	11,971
1882	10,370	1891	12,160
1883	10,490	1892	12,451
1884	10,682	1893	12,644
1885	10,957	1894	12,770

Schools and Classrooms.

Latin School	1	Classrooms in use	8
English High School	1	" " "	13
Grammar Schools	11	" " "	129
Primary Schools	21	" " "	112
Kindergartens	8	" " "	9
Evening Drawing Schools	2	" " "	8
Evening High School	1	" " "	6
Evening Elementary Schools	4	" " "	15
Whole number of Day Schools			42
Number of classrooms for Day Schools			271

High School and Grammar School Houses.

Schoolhouses.	Number of Class-rooms.	Estimated Value.	Size of Lots, sq. ft.	Estimated Value.	Total Value.
Latin	8*	$40,000	37,828	$15,900	$55,900
English High	11†	220,000	74,366	18,000	238,000
Allston	12‡	30,000	15,193	4,600	34,600
Corlett	2	3,000	10,000	1,000	4,000
Harvard	16‡	45,000	20,494	12,000	57,000
Morse	14‡	73,000	25,650	7,000	80,000
Peabody	6	27,000	21,813	7,000	34,000
Putnam	13‡	60,000	11,900	8,300	68,300
Shepard	11	30,000	14,755	7,000	37,000
Thorndike	12	30,000	10,027	4,000	34,000
Washington	12‡	25,000	14,951	7,000	32,000
Webster	16‡	50,000	25,839	9,000	59,000
Wellington	13‡*a*	42,000	27,673	8,300	50,300
Total	146	$675,000	310,489	$109,100	$784,100

* Also a library, a physical laboratory, and an assembly hall.

† Also five recitation rooms, a library, a physieal laboratory, a chemical laboratory, a leeture room, a drawing room, and an assembly hall.

‡ Also an assembly hall.

‡*a* On the same lot there is another schoolhouse containing four rooms used for primary classes.

Primary School Houses.

Schoolhouses.	Number of Class-rooms.	Estimated Value.	Size of Lots, sq. ft.	Estimated Value.	Total Value.
Agassiz	7	$18,000	19,689	$6,000	$24,000
Boardman	8	12,000	10,018	4,000	16,000
Cushing	2	3,000	14,787	1,000	4,000
Dana	4	2,000	14,317	4,300	6,300
Dunster	4	4,000	10,000	2,000	6,000
Felton	4	6,000	15,090	4,500	10,500
Gannett	5	12,000	15,434	3,000	15,000
Gore	12	25,000	9,900	4,000	29,000
Holmes	4	6,000	11,182	4,500	10,500
Lassell	4	8,000	10,000	2,500	10,500
Lowell	4	7,000	12,033	2,500	9,500
Otis	8	12,000	8,270	4,000	16,000
Parker	6	19,000	12,329	7,000	26,000
Quincy	2	10,000	8,469	5,000	15,000
Reed	4	4,000	12,000	1,200	5,200
Riverside	4	5,000	11,192	3,000	8,000
Sargent	4	3,000	9,995	4,000	7,000
Stearns	4	3,000	10,050	5,000	8,000
Tarbell	4	8,000	19,500	4,000	12,000
Willard	12	25,000	20,079	5,000	30,000
Wyman	6	6,000	14,347	3,000	9,000
Primary Total	112	$198,000	268,681	$79,500	$277,500
Grammar "	127	415,000	198,295	75,200	490,200
High Schools "	19	260,000	112,194	33,900	293,900
Summary	258	$873,000	579,170	$188,600	$1,061,600

Number of teachers in the Day Schools.

[Special teachers are included in the total.]

December.	Latin School.	English High School.	Grammar Schools.	Primary Schools.	Kinder-gartens.	Total.	Normal Graduates.
1889	10	14	118	100	7	251	142
1890	10	15	121	101	11	263	146
1891	10	16	126	104	11	272	161
1892	10	19	131	106	12	284	166
1893	11	19	138	108	13	297	171
1894	12	21	142	114	15	312	191

Attendance at all the Day Schools.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1885	10,213	8,650	7,915	91.5
1890	11,914	10,089	9,325	92.4
1891	12,468	10,520	9,659	91.8
1892	12,845	10,861	9,959	91.7
1893	13,107	11,045	10,074	91.2
1894	13,254	11,166	10,322	92.4

Attendance at the Latin School.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1889	239	217	207	95.5
1890	224	204	199	96.4
1891	231	213	204	95.7
1892	238	213	203	95 4
1893	269	251	236	94.1
1894	319	303	286	94.3

Attendance at the English High School.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1889	397	345	331	96.1
1890	473	409	396	96.7
1891	552	480	464	96.6
1892	624	529	511	96.5
1893	681	569	549	96.5
1894	691	611	594	97.1

Attendance at the Grammar Schools.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1889	5,602	4,864	4,517	92.9
1890	5,668	4,891	4,557	93.2
1891	5,793	5,052	4,701	93.1
1892	5,891	5,175	4,803	92.8
1893	5,981	5,206	4,838	92.9
1894	5,934	5,200	4,876	93.8

Attendance at the Primary Schools.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1889	5,617	4,537	4,086	90.0
1890	5,321	4,403	4,011	91.1
1891	5,499	4,481	4,065	90.7
1892	5,697	4,650	4,203	90.4
1893	5,757	4,666	4,215	90.3
1894	5,815	4,741	4,317	91.1

Attendance at the Kindergartens.

Year.	Number of Pupils Registered.	Average Number Belonging.	Average Daily Attendance.	Per cent of Attendance.
1891	393	294	225	76.7
1892	395	294	239	81.2
1893	419	353	236	66.9
1894	495	311	249	80.3

Number of pupils admitted to the lowest class of the Latin School.

Course, 5 years.

Year.	Boys.	Average Age.	Girls.	Average Age.
1888	36	14 yrs. 7 mos.	24	15 yrs. 0 mos.
1889	37	14 yrs. 10 mos.	34	14 yrs. 7 mos.
1890	39	14 yrs. 6 mos.	22	14 yrs. 9 mos.
1891	32	14 yrs. 5 mos.	35	14 yrs. 3 mos.
1892	52	14 yrs. 7 mos.	32	14 yrs. 7 mos.
1893	63	14 yrs. 6 mos.	41	14 yrs. 1 mo.
1894	51	14 yrs. 8 mos.	44	14 yrs. 4 mos.

Number of pupils graduated from the Latin School.

Course, 5 years.

Year.	Boys.	Average Age.	Girls.	Average Age.
1888	13	18 yrs. 7 mos.	9	19 yrs. 0 mos.
1889	16	18 yrs. 11 mos.	11	19 yrs. 3 mos.
1890	10	18 yrs. 8 mos.	7	19 yrs. 2 mos.
1891	22	18 yrs. 4 mos.	14	18 yrs. 4 mos.
1892	8	17 yrs. 8 mos.	14	18 yrs. 7 mos.
1893	16	19 yrs. 3 mos.	7	19 yrs. 5 mos.
1894	15	18 yrs. 11 mos.	12	19 yrs. 6 mos.

Number of pupils admitted to the lowest class of the English High School and the Manual Training School.

[The Manual Training School is connected with the English High School.]

Year.	English High. Course, 4 yrs.	Average Age.	Manual Training. Course, 3 yrs.	Average Age.
1888	147	15 yrs. 2 mos.	47	15 yrs. 2 mos.
1889	204	15 yrs. 3 mos.	49	15 yrs. 3 mos.
1890	171	15 yrs. 1 mo.	59	15 yrs. 3 mos.
1891	196	15 yrs. 1 mo.	56	15 yrs. 5 mos.
1892	230	15 yrs. 3 mos.	85	15 yrs. 3 mos.
1893	210	15 yrs. 3 mos.	73	15 yrs. 1 mo.
1894	239	15 yrs. 1 mo.	72	15 yrs. 2 mos.

Number of pupils graduated from the English High School and the Manual Training School.

[The Manual Training School is connected with the English High School.]

Year.	English High. Course, 4 yrs.	Average Age.	Manual Training. Course, 3 yrs.	Average Age.
1888	42	18 yrs. 11 mos.	Course changed to 4 years in 1893.	In 1893, 6 of the 32 in 4 years' course.
1889	52	18 yrs. 6 mos.		
1890	37	18 yrs. 7 mos.		In 1894, 4 of the 26 in 4 years' course.
1891	35	18 yrs. 4 mos.	13	17 yrs. 4 mos.
1892	52	18 yrs. 9 mos.	25	18 yrs. $\frac{1}{4}$ mo.
1893	63	18 yrs. 10 mos.	32	18 yrs. $\frac{3}{4}$ mo.
1894	65	18 yrs. 7 mos.	26	17 yrs. 10 mos.

Number of pupils admitted to the lowest class in the Latin School and the English High School since 1887, with the number of graduates.

Admitted to Latin School.	Graduated from Latin School.	Admitted to English High.	Graduated from English High.	Admitted to Manual Training Course.	Graduated from Manual Training Course.
628	186	1,529	395	441	96

Number of pupils graduated from the Grammar and Primary Schools.

Year.	Grammar Schools. Course, 6 yrs.	Average Age.	Primary Schools. Course, 3 yrs.	Average Age.
1891	419	15 yrs. 3 mos.	1,142	10 yrs. 0 mos.
1892	536	15 yrs. $\frac{4}{5}$ mo.	1,146	9 yrs. 10 mos.
1893	487	14 yrs. 11 mos.	1,147	9 yrs. 9 mos.
1894	563	14 yrs. 11$\frac{1}{2}$ mos.	1,159	9 yrs. 8$\frac{1}{2}$ mos.

Length of time in completing the Course of Study in the Grammar Schools.

Year.	In 4 years.	In 5 years.	In 6 years.	In 7 years or more.
1892	10 per cent	27 per cent	45 per cent	18 per cent
1893	9 per cent	29 per cent	47 per cent	15 per cent
1894	10 per cent	32 per cent	42 per cent	16 per cent

Length of time in completing the Course of Study in the Primary Schools.

Year.	In 2 years.	In 2½ years.	In 3 years.	In 3½ years.	In 4 years.	In 4½ years or more.
1892	5 per cent		66 per cent		20 per cent	9 per cent
1893	6 per cent	3 per cent	56 per cent	3 per cent	20 per cent	12 per cent
1894	8 per cent	2 per cent	58 per cent	2 per cent	21 per cent	9 per cent

Table showing how many of a class complete the Course of Study.

Schools.	Number that Entered.	Number that Graduated.	Number that Entered.	Number that Graduated.
Latin School	60 (1888)	23 (1893)	71 (1889)	27 (1894)
English High School...	253 (1889)	95 (1893)	230 (1890)	91 (1894)
Grammar Schools.....	1,123 (1887)	487 (1893)	1,222 (1888)	563 (1894)
Primary Schools.	2,082 (1890)	1,147 (1893)	1,969 (1891)	1,159 (1894)

Number of pupils in all the Day Schools at different periods of the year.

Year.	First day of the first week.	First day of the second week.	First week of October.	First week of June.
1889	9,584	10,195	10,455	10,238
1890	9,687	10,360	10,678	10,221
1891	9,580	10,461	11,180	10,863
1892	10,184	10,974	11,360	11,204
1893	10,692	11,354	11,628	11,342
1894	10,889	11,562	11,847	11,532

Number of pupils in the Latin School, December, 1894.

Grade.	Boys.	Girls.	Total.	Per cent.
Fourteenth	20	14	34	.092
Thirteenth	33	30	63	.171
Twelfth	40	28	68	.185
Eleventh	48	51	99	.269
Tenth	55	49	104	.283
Total	196	172	368	

Number of pupils in the English High School and in the Manual Training School, December, 1894.

Grade.	Boys.	Girls.	Total.	Per cent.
Thirteenth	20 (1)*	45	65	.092
Twelfth	64 (39)*	71	135	.190
Eleventh	84 (59)*	105	189	.267
Tenth	158 (79)*	162	320	.451
Total	326 (178)*	383	709	

* Manual Training School.

Number of pupils in the Grammar Schools, December, 1894.

Grade.	Boys.	Girls.	Total.	Per cent.
Ninth	218	234	452	.082
D	43	43	86	.016
Eighth	271	314	585	.106
C	74	53	127	.023
Seventh	416	430	846	.154
Sixth	404	426	830	.151
B	138	130	268	.049
Fifth	458	446	904	.165
A	163	171	334	.061
Fourth	545	513	1,058	.193
Total	2,730	2,760	5,490	

Number of pupils in the Primary Schools, December, 1894.

Grade.	Boys.	Girls.	Total.	Per cent.
Third	702	657	1,359	.273
Second	720	684	1,404	.283
First	1,173	1,034	2,207	.444
Total	2,595	2,375	4,970	

Number of pupils and teachers in the Kindergartens, 1892, 1893, 1894.

Year.	Boys.	Girls.	Total.	Number of Teachers.
1892	140	174	314	12
1893	148	178	326	13
1894	180	207	387	15

Number of pupils belonging to the Evening Drawing Schools with the average attendance.

1889.	1890.	1891.	1892.	1893.	1894.
228	166	188	219	242	217
120	106	110	127	142	103

Number of pupils belonging to the Evening Schools with the average attendance.

1889.	1890.	1891.	1892.	1893.	1894.
425	739	1,020	1,013	1,085	1,379
181	298	362	329	419	542

Number of pupils in the Private Schools in Cambridge including those in the Parochial Schools.

1889.	1890.	1891.	1892.	1893.	1894.
2,037	2,050	2,127	2,235	2,376	2,492

Cost of instruction in the Evening Schools.

Year.	Elementary.	High.	Drawing.	Total.
1889	$1,247 00	$855 00	$1,230 00	$3,332 00
1890	1,513 00	1,260 00	546 00	3,319 00
1891	1,851 50	1,191 25	867 00	3,909 75
1892	1,827 50	1,226 25	1,157 00	4,210 75
1893	2,124 50	1,363 00	1,531 00	5,018 50
1894	2,293 00	1,396 00	1,175 00	4,864 00

Cost of instruction in the Day Schools.

[Salaries of teachers, superintendent, agent, and truant officers.]

Year.	Number of Teachers January 1.	Average Number of Pupils.	Whole Cost.	Cost per Pupil.
1876	176	7,066	$164,818 00	$23 32
1878	173	7,028	136,491 20	19 42
1880	182	7,175	130,371 75	18 17
1882	200	7,898	137,328 55	17 38
1884	216	8,414	152,290 62	18 09
1885	224	8,650	158,640 13	18 33
1886	233	9,218	165,277 42	17 92
1887	237	9,429	172,135 06	18 25
1888	241	9,756	175,773 80	18 02
1889	251	9,962	180,816 26	18 15
1890	263	10,089	190,558 21	18 89
1891	272	10,520	196,938 70	18 72
1892	284	10,861	207,144 22	19 07
1893	297	11,045	215,593 12	19 52
1894	312	11,166	228,873 48	20 50

Cost of the Day Schools.

[The expenditures for new schoolhouses are not included.]

Year.	Number of Teachers January 1.	Average Number of Pupils.	Whole Cost.	Cost per Pupil.
1876	176	7,066	$200,894 09	$28 43
1878	173	7,028	162,437 77	23 11
1880	182	7,175	153,967 56	21 45
1882	200	7,898	166,230 52	21 04
1884	216	8,414	203,234 56	24 15
1885	224	8,650	206,806 09	23 90
1886	233	9,218	207,536 46	22 51
1887	237	9,429	222,679 19	23 61
1888	241	9,756	225,408 57	23 10
1889	251	9,962	229,421 31	23 03
1890	263	10,089	241,980 84	23 98
1891	272	10,520	249,491 67	23 71
1892	284	10,861	266,651 02	24 55
1893	297	11,045	274,053 82	24 81
1894	312	11,166	287,137 37	25 72

Summary of the School Census as taken by the Truant Officers, May, 1894.

[The Statutes make it the duty of the School Committee to ascertain annually the names and ages of all persons between the ages of five and fifteen years, belonging in their respective towns and cities on the first day of May.]

Number of children in the city five years old or more, but less than fifteen	12,770
Number in public schools five years old or more, but less than fifteen	10,198
Number in public schools fifteen years old or more, as shown by the school register	1,294
Number in private schools five years old or more, but less than fifteen	1,770
Number not attending school five years old or more, but less than eight	575
Number not attending school eight years old or more, but less than fourteen	96
Number not attending school fourteen years old or more, but less than fifteen	131
Whole number not attending school five years old or more, but less than fifteen	812
Number in the city five years old or more, but less than six	1,202
Number in the city eight years old or more, but less than fourteen	7,741

Finances.

[For the financial year ending December 1, 1894.]

Cost of instruction in day schools	$228,873 48
Cost of instruction in evening schools	4,864 00
Cost of care and repairs of schoolhouses, day schools	43,736 27
Cost of care and repairs of schoolhouses, evening schools	2,400 00
Cost of text books and supplies	12,999 49
Expended for incidental expenses	846 63
Expended for transportation of pupils	681 50
Expended for land for Latin and English High Schools	43,911 45
Expended for land for schoolhouse in Ward 3	7,000 00
Expended for land for Sleeper Schoolhouse	4,256 80
Expended for construction of Sleeper Schoolhouse	4,046 66
Expended for finishing the Parker Schoolhouse	5,426 46
Expended for furnishing the Parker Schoolhouse	384 41
Expended for improvements in sanitary arrangements	4,292 55
Total expenditures for all school purposes	$363,719 70
Deducting from the above the amount received from the Hopkins Fund, $745.84, and for the tuition of non-resident pupils, $1,001.25, the actual cost of the schools to the city is	$361,972 61
Assessed value of real and personal estates, May, 1894	$77,535,620 00
Ratio of expenditures for school purposes to the valuation in 1894	.0047

Statistics taken from the fifty-eighth annual report of the Secretary of the State Board of Education.

Number of cities and towns: cities, 30; towns, 323;	353
Number of public schools	7,833
Number of pupils of all ages in the public schools during the year	400,609
Number of persons over fifteen years of age attending the public schools	37,105
Per cent of attendance based upon the average membership	91
Number of persons employed as teachers in the public schools during the year: men, 989; women, 10,244;	11,714
Number of teachers who have graduated from normal schools	3,575
Average number of months the public schools have been kept for the entire year	8¾
Number of high schools	255
Number of teachers in high schools	1,040
Number of pupils in high schools	30,540
Amount expended upon the public schools, exclusive of the expense of school buildings	$7,800,254 31
Cost of new schoolhouses, permanent improvements, and ordinary repairs	2,167,972 97
Entire expenditure for public school purposes	$9,968,227 28

Special Institutions.

The following are the statistics of the attendance and expenses of the Massachusetts pupils in the several schools for the deaf, the blind, and the feeble-minded.

AMERICAN ASYLUM AT HARTFORD, CONN.

Number of Massachusetts beneficiaries, 1893–94	60
Paid for these pupils	$10,945 96

CLARK INSTITUTION, NORTHAMPTON.

Number of Massachusetts beneficiaries, 1893–94	107
Paid for these pupils	$18,791 14

HORACE MANN SCHOOL, BOSTON.

Number of Massachusetts beneficiaries, 1893–94	105
Paid for these pupils	$11,696 80

PERKINS INSTITUTION FOR THE BLIND.

Number of Massachusetts beneficiaries, 1893–94	112
Annual appropriation from the state	$30,000 00

SCHOOL FOR THE FEEBLE-MINDED, WALTHAM.

Number of Massachusetts beneficiaries, 1893–94	167
Annual appropriation from the state	$25,000 00

TABULAR VIEW.

JANUARY 1, 1895.

Prepared by the Secretary of the School Committee.

Names of Schools.	Teachers.	Salaries.	No. of Pupils Jan. 1, 1895.
Latin	William F. Bradbury	$3,000	368
	Theodore P. Adams	2,000	
	Herbert J. Chase	1,300	
	Helen M. Albee	950	
	Constance Alexander	650	
	Charlotte C. Barrell	950	
	Caroline Drew	950	
	Mary C. Hardy	950	
	Margarette M. Leighton	950	
	Emma M. Sawyer	950	
	Jennie S. Spring	950	
	Anna M. Warren	750	
	Annie S. Dodge *	400	
English High	Ray Greene Huling	3,000	709
	Edwin L. Sargent	2,000	
	Charles F. Warner	2,000	
	Joseph A. Coolidge	1,200	
	Clara A. Armes	950	
	Harriet E. Bird	1,050	
	Caroline Close	950	
	Mabel L. Chamberlain	700	
	Bertha L. Cogswell	750	
	Grace L. Deering	950	
	Myra I. Ellis	1,000	
	Maud A. Lawson	850	
	Henrietta E. McIntire	750	
	Mary Moulton	950	
	Louisa P. Parker	1,000	
	Lillian C. Rogers	800	
	Caroline A. Sawyer	950	
	Emma A. Scudder	950	
	Martha R. Smith	950	
	Maria E. Spare	950	
	Delia M. Stickney	1,050	
	Martha L. Babbitt *	500	
Allston	Benjamin W. Roberts	2,000	574
	Sara A. Bailey	700	
	Emily R. Pitkin	650	
	Susan M. Adams	620	
	Mary Blair	620	
	Mary M. Brigham	620	
	S. Alice Fell	620	
	Susan L. Keniston	620	
	Evelyn B. Kenny	620	
	Ada M. Litchfield	570	
	Nina M. Marsh	620	
	S. Agnes Mulloney	620	

* Secretary and Librarian.

Tabular View — *Continued.*

Names of Schools.	Teachers.	Salaries.	No. of Pupils Jan. 1, 1895.
Allston	Ida G. Smith	$620	
	Caroline M. Williams	620	
Harvard	James S. Barrell	2,000	686
	Arthur A. Lincoln	1,200	
	Ada H. Wellington	700	
	Margaret B. Wellington	700	
	Anna M. Brown	650	
	Addie L. Bartlett	620	
	Marcia R. Bowman	400	
	Elizabeth L. Buckley	620	
	Mary F. Emerson	620	
	Frances Fabyan	620	
	Alice V. Flather	570	
	Estella J. French	620	
	Eliza S. Getchell	620	
	Adeline M. Murphy	620	
	Louise C. Patterson	620	
	Annie M. Street	620	
	Emma F. West	570	
	Hortense O. Young	620	
Morse { Grammar	Mary A. Townsend	2,000	{ 400
Morse { Primary			{ 173
	Mary E. Towle	700	
	Marcia E. Ridlon	650	
	Elizabeth J. Baldwin	620	
	Stella L. Cotton	520	
	Marie B. Daniel	570	
	Annie M. Dow	620	
	Leila F. Drake	620	
	Annie M. Fellows	620	
	Mary E. Leavitt	620	
	Alice E. May	570	
	Emilie Richardson	620	
	Mary E. Sawyer	620	
	Lucy M. Soulée	620	
	Gertrude D. Sprague	570	
Peabody	Frederick S. Cutter	2,000	300
	Addie F. Cleary	700	
	Susan Allison	620	
	Anna F. Bellows	620	
	Mabel A. Clark	520	
	Charlotte A. Ewell	620	
	Florence E. Frost	620	
Putnam	Thomas W. Davis	2,000	700
	Frederick B. Thompson	1,000	
	Eliza M. Hussey	700	
	Henriette E. de Rochemont	650	
	Ella R. Avery	620	
	Mary A. Carmichael	620	
	Anna L. P. Collins	620	
	Sarah M. Grieves	620	
	Hattie B. Jewell	400	
	Annie B. Josselyn	620	

Tabular View — *Continued.*

Names of Schools.	Teachers.	Salaries.	No. of Pupils Jan. 1, 1895.
Putnam	Louise A. Keeler	$620	
	Mabel S. Murray	520	
	Eliza S. Paddack	620	
	Louise A. Stickney	620	
	Mary M. Sullivan	620	
	Annie A. Trelegan	620	
	Myra D. Webster	470	
Shepard	Edward O. Grover	2,000	591
	Nellie A. Hutchins	700	
	Ella M. Horne	600	
	Mary C. Adams	620	
	Caroline L. Blake	620	
	Mabel E. Blake	620	
	Emma A. Faulkner	620	
	Emily F. Fessenden	620	
	Harriet Foster	620	
	Louise H. Griswold	620	
	Ellen J. Hunt	620	
	A. Estelle Ingraham	620	
	Flora C. Ingraham	620	
	Melissa M. Lloyd	620	
	Evelyn J. Locke	620	
Thorndike	Ruel H. Fletcher	2,000	500
	Harriet A. Townsend	700	
	Laura A. Westcott	650	
	Grace W. Fletcher	620	
	Lottie L. Griswold	620	
	Emma A. Hopkins	620	
	Elizabeth G. Hutchison	620	
	Grace L. Morton	400	
	Mary E. Nason	620	
	S. Louise Regal	620	
	Alice C. Taggart	620	
	Abby S. Taylor	620	
	Lydia A. Whitcher	620	
Washington	John W. Freese	2,000	476
	M. Florence McGlashan	700	
	Alice P. Fay	650	
	Eldora J. Clark	620	
	Lucy A. Downing	620	
	Mary L. Ells	620	
	Ellen A. Kidder	620	
	Winifred L. Kinsley	620	
	Emily M. Marston	620	
	Emma Penney	470	
	Margaret J. Penney	620	
	Hattie Shepherd	620	
	Mary E. Stiles	620	
	Abby M. Webb	620	
Webster	John D. Billings	2,000	665
	Melzar H. Jackson	1,100	
	Alice C. Phinney	700	
	Martha N. Hanson	700	

Tabular View — *Continued.*

Names of Schools.	Teachers.	Salaries.	No. of Pupils Jan. 1, 1895.
Webster	Ada A. Billings	$650	
	Emma E. Billings	570	
	Flora E. Billings	520	
	Ella E. Buttrick	620	
	Charlotte M. Chase	620	
	Susan I. Downs	620	
	Josephine Hills	620	
	Edith M. Keith	620	
	M. Josephine Lamprey	620	
	Anna S. Lamson	620	
	Minnie V. Reid	620	
	Harriette E. Shepard	620	
	Ellen F. Watson	620	
Corlett	Fannie P. Browning	630	63
	Mary L. Gamwell	620	
Agassiz { Grammar	Maria L. Baldwin	800	{ 109
Agassiz { Primary			{ 201
	Sarah E. Barrett	620	
	Mary G. Carpenter	620	
	Amy Greaves	520	
	Jennie Lyle	620	
	Minnie A. Noyes	620	
	Mary A. Parsons	570	
	Jennie L. Upham	470	
Boardman	Mary A. Lewis	690	319
	Florence H. Barrett	620	
	Christine R. Denyven	620	
	Alice Gregg	620	
	Elizabeth J. Karcher	620	
	Grace Morgan	400	
	C. Florence Smith	620	
	Sarah E. Stewart	620	
Cushing	Isadore I. Foster	630	69
	Lucy E. Cyr	620	
Dana	Georgia E. Martin	590	149
	Jane Macmaster	400	
	Matilda Macmaster	470	
	Marion B. Magwire	470	
Dunster	Susan E. Wyeth	645	176
	Mary E. Colby	620	
	Mary A. Doran	470	
	Isabel Foster	620	
Felton	Florence A. Rogers	640	176
	S. Emma Davis	570	
	Helen E. Hazard	470	
	Carrie H. Smith	620	
Gannett	Sarah J. A. Davis	640	178
	Annie M. Billings	570	
	Anna M. Jones	620	
	Mary A. Rady	620	
Gore	Frances E. Pendexter	685	562
	Anna E. Callahan	620	
	Addie H. Dale	620	

Tabular View — *Continued.*

Names of Schools.	Teachers.	Salaries.	No. of Pupils Jan. 1, 1895.
Gore	Maude A. Deehan	$570	
	Elizabeth B. Gahm	620	
	Katherine L. McElroy	620	
	Julia G. McHugh	400	
	Mary C. McNally	620	
	Mary E. Mulloney	620	
	Anastasia Peters	520	
	Emma J. Ross	620	
	Margaret Sullivan	470	
	Jane E. Whoriskey	520	
Holmes	Marianne M. Webb	630	86
	Ellen M. Cyr	620	
Lassell	Ellen F. Ball	640	201
	Rose V. Collier	620	
	Cora A. Reycroft	620	
	Frances E. Whoriskey	620	
Lowell	Eusebia A. Minard	640	150
	Malvina M. Joslin	620	
	Agnes J. McElroy	570	
Otis	Ellen N. Leighton	660	339
	Frances Allen	620	
	Bridget T. Boyle	470	
	Ellen B. Collier	470	
	Josephine M. Doherty	620	
	Luella M. Marsh	620	
	Ellen C. Walsh	620	
	Kate F. Wellington	620	
Parker	Emily C. Dallinger	655	211
	Mary M. Bucknam	620	
	Margaret E. Fitzgerald	400	
	Agnes Marchant	400	
	Maude L. Hayward	400	
Quincy	Charlotte E. Jewell	630	86
	Lucy C. Wyeth	620	
Reed	Margaret Kidd	640	218
	Margaret T. Burke	620	
	Fannie G. Flanders	470	
	Jennie R. Marsh	400	
	Julia A. Robinson	620	
Riverside	Elizabeth A. Tower	640	117
	Amanda M. Alger	620	
	Mary A. Burke	620	
Sargent	Mary A. Brown	640	180
	Christina D. Barbey	620	
	Alice J. Hubbard	400	
	Ella M. Leaver	620	
Stearns	Fannie E. Higgins	640	187
	Maria J. Bacon	620	
	Ellen A. Cheney	620	
	Eva A. Taylor	620	
Tarbell	Emma J. Young	640	160
	Florence J. Alley	520	
	Ellen F. McCarthy	620	
	Carrie P. Pierce	620	

Tabular View — *Continued.*

Names of Schools.	Teachers.	Salaries.	No. of Pupils Jan. 1, 1895.
Willard	Amelia Wright	$710	450
	Sally N. Chamberlain	620	
	M. Elizabeth Evans	620	
	Ella F. Gulliver	620	
	Julia S. Gushee	620	
	Mary E. G. Harrington	620	
	Louise W. Harris	620	
	Katherine M. Lowell	620	
	Emma C. Otis	620	
	Eliza D. Watson	620	
	Grace R. Woodward	620	
	Laura Wright	620	
Wyman	Fannie E. M. Dennis	650	301
	Addie M. Bettinson	620	
	M. Carrie Dickman	620	
	Georgianna P. Dutcher	620	
	Genevieve S. Flint	520	
	Mary M. Gilman	620	
Wellington { Grammar... Primary....	Herbert H. Bates	2,200	{ 426 281
	Susan G. Lombard	800	
	Sarah J. Gunnison	800	
	Mary I. Vinton	800	
	Carrie H. Stevens	700	
	Emma M. Taylor	620	
	Mary I. Ford	400	
	Training Class	4,400	
Kindergartens. Boardman	Mabel S. Eddy	620	45
	Margaret G. Mulloney	520	
Dunster	Clara A. Hall	570	37
	Mabel L. Sanderson	440	
Gannett	Gertrude M. Gove	570	55
	Margaret Sherlock	400	
Gore	Selma E. Berthold	620	60
	Sarah S. Wells	440	
Lowell	Melinda Gates	620	39
	Frances L. Plimpton	440	
Moore Street	Harriette E. Ryan	620	62
	Nellie A. Watson	440	
Riverside	Helen I. Hutchison	620	61
	Mabel F. Adams	440	
Spruce Street	Katherine C. Richmond	400	28
Teacher of Botany	Sarah E. Brassill	550	
Teacher of Gymnastics	Clara E. Sheppard	500	
Teachers of Sewing	Agnes Gordon	600	
	Alice H. Nay	600	
	Sarah J. Stanton	200	
Director of Music	Frederick E. Chapman	2,000	
Director of Drawing	James M. Stone	1,700	
Assistant in Drawing	Lucia N. Jennison	800	

The Wellington school is a training school composed of grammar and primary pupils taught by young ladies, graduates of normal schools and candidates for the position of teacher, under the direction and with the assistance of the master of the school and his assistants.

Temporary assistants and members of the training class are counted as eight teachers, the sum of their salaries being about equal to the amount paid to that number of regular teachers.

Superintendent — Francis Cogswell	$3,000
Agent — Sanford B. Hubbard	1,800
Clerk — Althea B. Frost	600
Truant Officers — John Carmichael	900
Moses M. Child	900
Francis M. Mason	900
William H. Porter	700

Summary.

Number of pupils in Latin School	368
Number of pupils in English High School	709
Number of pupils in Grammar Schools	5,490
Number of pupils in Primary Schools	4,970
Number of pupils in Kindergartens	387
Total	11,924
Number of pupils belonging to the Public Schools, January 1, 1894	11,646
Increase of pupils, 1894	278
Increase of pupils, 1893	135
Increase of pupils, 1892	210
Increase of pupils, 1891	222
Average annual increase of pupils, from 1880 to 1890 (inclusive)	331

Cost of Instruction.

Latin School	$14,359 66	For each pupil	$39 02
English High School	23,051 00	" " "	32 51
Training School	11,068 00	" " "	15 65
Grammar Schools	93,574 60	" " "	18 48
Primary Schools	62,547 40	" " "	13 34
Kindergartens	7,384 82	" " "	19 08
Teachers of Sewing	1,400 00		
Director of Music	1,860 00		
Directors of Drawing	2,500 00		
Teacher of Botany	495 00		
Teacher of Gymnastics	440 00		
Substitute Teachers	493 00		
Superintendent	3,000 00		
Agent	1,800 00		
Clerk	600 00		
Special Teacher in Primary Schools	900 00		
Truant Officers	3,400 00		
	$228,873 48	For each pupil	19 19
Cost of instruction in Evening High School			$1,396 00
Cost of instruction in Evening Elementary Schools			2,293 00
Cost of instruction in Evening Drawing Schools			*1,175 00
			$4,864 00

*The director of drawing is principal of these schools. No part of his salary is included in this amount.

The Post Office addresses of the several schools are as follows:

CAMBRIDGE — English High, * Corlett, * Peabody, * Washington, Agassiz, Cushing, Dunster, Holmes, Lowell, Quincy, Riverside.

CAMBRIDGEPORT — Latin, * Allston, * Harvard, * Morse, * Webster, Boardman, Dana, Felton, Gannett, Parker, Sargent, Stearns, Tarbell, * Wellington, Willard.

EAST CAMBRIDGE — * Putnam, * Thorndike, Gore, Lassell, Otis.

NORTH CAMBRIDGE — * Shepard, Reed, Sleeper, Wyman.

Remarks on the Statistics.

The increase over the last school year in the number of pupils registered is 147; in the average number belonging, 121; in the average daily attendance, 248. In the per cent of attendance there has been an increase of 1.2 per cent. The number belonging to the schools in December, 1893, was 11,646; in December, 1894, 11,924; an increase of 278. The entire cost of the day schools, excluding the expenditures for new schoolhouses and new furniture, exceeds that of last year by $13,083.55, and the cost per pupil by 91 cents. In the entire cost of instruction the increase is $13,280.36, an increase in the cost per pupil of 98 cents. While Cambridge expends a large amount for her schools, there are *two hundred and thirty-six* towns and cities in the state which make a larger expenditure in proportion to their wealth. In a list of the thirty cities, arranged numerically according to the percentage of their taxable property appropriated to the support of public schools for the year 1893–1894, Cambridge is the *eighteenth;* and compared with the fifty-four towns and cities of our county, Cambridge is the *thirty-second.* In a list of the towns and cities of the state, arranged numerically according to the sum appropriated for each child between five and fifteen years of age, Cambridge is the *thirty-sixth.*

These statistics relating to the schools of the state are taken from the fifty-eighth annual report of the Secretary of the Board of Education.

* Grammar Schools.

Textbooks and Supplies.

At the meeting of the Board in December, the committee on supplies submitted a detailed report of the expenditures of that committee for the year.

This report was accepted, and it was voted that it be incorporated in the annual report of the school committee. The report is as follows: —

In accordance with Section 29 of the rules of the school board, the Committee on Supplies submit their report for the school year ending July 1, 1894, it being their tenth annual report.

Stock on hand July 1, 1893	$2,660 06	
Purchases and expenditures from the appropriation	14,562 36	
Purchases and expenditures by exchanges	393 25	
		$17,615 67
Delivered to schools, officers, etc.	$14,993 91	
Sold and exchanged from stock	109 22	
Stock on hand July 1, 1894	2,512 54	
		17,615 67
The purchases and expenditures have been: —		
For textbooks	$6,102 89	
Desk and reference books	1,122 89	
Copy and drawing books	1,008 21	
Apparatus and furnishings	1,884 98	
Printing, $380.81; expressage and labor, $212.59;	593 40	
Repairing books, $166.09; diplomas, $173.28;	339 37	
Miscellaneous supplies, etc.	3,903 87	
		14,955 61
Less the value of exchanges		393 25
		14,562 36
The net cost of textbooks and supplies is as follows: —		
Stock on hand July 1, 1893	$2,660 06	
Bills paid by the City Treasurer	14,562 36	
		17,222 42
Less stock on hand July 1, 1894	2,512 54	
Cash paid to City Treasurer, sales and damages	233 69	
		2,746 23
		14,476 19
We have, net cost of all schools and officers		$14,476 19

or an average cost per pupil of $1.243 against $1.109, for the year 1893; $1.149, for the year 1892; $1.248, for the year 1891; $1.334, for the year 1890; $.960, for the year 1889; $1.068, for the year 1888; $1.051, for the year 1887; $1.17, for the year 1886; and $1.88, for the year 1885. The average cost per pupil per annum for ten years has been $1.221.

The cost of each grade of schools for textbooks and supplies is as follows: —

	Net Expense.	Average per Pupil.				
		1894.	1893.	1892.	1891.	1890.
High Schools	$3,668 81	$3.794	$3.969	$3.826	$3.855	$5.362
Grammar Schools	5,914 95	1.301	1.106	.969	1.231	1.618
Mixed Schools	2,043 30	1.264	1.005	2.398	1.203	.985
Primary Schools	1,547 45	.369	.226	.140	.503	.286
Kindergartens	191 73	.588	.497	.316	.648	.....
Evening Schools	448 07	.....	.....	.....	.....	.....
Special Teachers	82 41	.....	.....	.....	.....	.....
Miscellaneous expenses (not chargeable to any grade).	592 26	.....	.....	.....	.....	.....
	$14,488 98					
Less profit on sales	12 79	.....	.....	.....	.....	.....
	$14,476 19	$1.243	$1.109	$1.149	$1.248	$1.334

There has been an increase of expenditure over that of the year 1892–93 of $1,205.13, or of $.134 per pupil. The increase in the amount for textbooks is $564.03; for desk, reference, and library books, $694.13; for apparatus $660.58; while the expenditures for copy and drawing books and for miscellaneous supplies are less than last year by $713.63.

A large amount was expended for desk, reference, and library books, and for physical apparatus for the Latin school this year, but comparatively little for the English high school, which was well supplied last year. The increase in expenditure for the grammar, mixed, and primary schools is due to the introduction of new reading books, the introduction of physics in the grammar schools (160 sets of apparatus have been furnished at a cost of $492.79), the purchase of a piano for the Training school, and a larger supply of note books, etc., required by the new methods of teaching. A small kindergarten has been opened at North Cambridge, which was furnished with materials.

School Accommodations.

During the summer vacation the two unfinished rooms in the Parker schoolhouse were made ready for use at the opening of the schools in September. The building, as now completed and furnished, cost, exclusive of the land, nearly nineteen thousand dollars. This includes a special expenditure of eight hundred dollars for deep foundation-walls. The building is of brick, and contains six classrooms with convenient cloakrooms and toilet-rooms. It is heated by furnaces, and by means of mixing valves a constant supply of pure air is secured.

In North Cambridge, an eight-room schoolhouse is well under way, and will probably be ready for use by the first of March. The building is of brick, and will cost about twenty-five thousand dollars. The cost of the land was between forty-two and forty-three hundred dollars. The school is named the Sleeper school, in honor of Mr. Solomon S. Sleeper.

Land has been bought for a schoolhouse in East Cambridge, and a committee has been authorized to buy a lot for a schoolhouse which shall accommodate the pupils of the Belmont district and those in that vicinity.

By the purchase of the land behind the English high school building, room has been secured for the extension of the wings of that building when required, and for a new Latin schoolhouse, which is needed at the present time.

New plumbing has been put into the Cushing, old Gannett, Lassell, and Lowell schoolhouses at a cost of nearly forty-three hundred dollars. The objectionable condition of the sanitary arrangements of the Washington and the Harvard school buildings should be remedied during the next summer vacation.

The appointment of a competent mechanic as head janitor is again recommended by the committee on schoolhouses. Their report says, "Such a man could save the city a large sum every year in fuel, and by making small repairs in and about the buildings; he could also greatly increase the efficiency of the janitors by constant supervision."

During the past nine years six new schoolhouses have been built, three have been enlarged or remodelled, and many of the

old ones greatly improved. This work has been done under the supervision of the superintendent of public buildings, Mr. Benjamin H. Steele. The school department found in Mr. Steele a person interested in the schools, and one ready to do all in his power for their better accommodation.

School Reports.

By the rules of the school committee it is one of the duties of the superintendent "to make a report to the Board annually, giving an account of the schools, and making such suggestions as he may deem advisable." For several years his report has been adopted by the Board as the annual report required by statute. It is important, therefore, that the superintendent in preparing his report should keep in mind the use to which it may be put.

Formerly it was the practice of the committee to give a detailed account of each school, even mentioning the teachers by name, but from year to year the reports have been of a more general character; and, in these recent years, it has been the purpose of the superintendent more and more to make them the source from which information can be obtained in regard to the general plan of the work in the schools, and the doings of the committee.

During the past year the superintendent has received many letters from persons seeking information on subjects relating to the schools. It is his intention that this report shall contain such information as would be given should similar letters be received the coming year. In preparing it he has made use of the reports of the several committees of the Board, of statements made by the special teachers, and of information given by teachers of special subjects; and he has not hesitated to copy from previous reports whatever would be of use in carrying out this plan.

Latin School. March 1, 1886, the Classical and English departments of the Cambridge high school were made two separate schools, called respectively "The Cambridge Latin School" and "The Cambridge English High School." At the

time of the separation, the Cambridge high school contained five hundred fifteen pupils, and the number of teachers was sixteen. One hundred sixty-five of the pupils, and six of the teachers went to the Latin school.

The following table shows the growth of the Latin school and the cost of instruction from year to year, beginning with the year 1887, the first full year of its organization. The salary of the secretary and librarian is included in the cost of instruction.

January 1.	Number of Pupils.	Number of Teachers.	Cost of Instruction.	Cost per Pupil.	Number of Graduates.
1887	238	9	$11,615 00	$48 80	12
1888	231	10	12,211 00	52 86	22
1889	219	10	12,555 00	57 78	27
1890	227	10	12,607 41	55 54	17
1891	230	10	12,967 50	56 38	36
1892	262	10	12,751 07	48 66	22
1893	311	11	13,425 66	43 17	23
1894	368	12	14,359 66	39 02	27

The cost of the Latin school to the city is less than the above sums by the amount received from the Hopkins fund, a fund which can be used only for Classical instruction. The cost per pupil each year would be from two to three dollars less, according to the number of pupils in the school.

The course of study is arranged for five years. The following is the rule in regard to the admission of pupils: "Pupils who have received the diploma of their respective grammar schools, certifying that they have satisfactorily completed the prescribed course of study, may be admitted to either high school without an examination. For other persons who desire admission, an examination shall be held at the beginning of the autumn term under the direction of the committee on high schools, but pupils may be admitted to advanced standing at any time. No pupil from any class in a grammar school

shall be examined who does not present a certificate that he has pursued his studies during vacation."

For non-resident pupils the tuition is fifty dollars a year, payable in advance, one-half at the beginning and the other half at the middle of the school year. The sessions of the school begin at 8.30 A. M., and close at 1.30 P. M. The course of study is printed in the appendix of this report.

The Latin school has outgrown its present accommodations, and steps have already been taken for a new building. The land has been bought, and the plans will undoubtedly be drawn without delay.

In September the teacher of physics in this school, Mr. Charles W. Parmenter, after a service of six years, resigned his position to accept the head-mastership of the mechanic arts high school in Boston, and Mr. Herbert J. Chase was appointed his successor.

English High School. The following table shows the growth of the English high school, and the cost of instruction from year to year, beginning with the year 1887, the first full year of its organization. The salary of the secretary and librarian is included in the cost of instruction.

January 1.	Number of Pupils.	Number of Teachers.	Cost of Instruction.	Cost per Pupil.	Number of Graduates.
1887	320	12	$13,950 00	$43 59	49
1888	363	12	14,045 00	38 69	42
1889	455	14	16,157 96	35 51	52
1890	518	15	17,962 50	34 68	37
1891	575	16	18,767 50	32 64	48
1892	613	19	20,488 50	33 42	77
1893	656	19	22,095 00	33 68	95
1894	709	21	23,051 00	32 51	91

The English high school was organized March 1, 1886. In 1888, manual training was included in the course of study, the instruction being given at the Cambridge manual training

school. February 12, 1892, the school moved to its present commodious building.

The course of study is arranged for four years. The following is the rule in regard to the admission of pupils: "Pupils who have received the diploma of their respective grammar schools, certifying that they have completed the prescribed course of study, may be admitted to either high school without an examination. For other persons who desire admission, an examination shall be held at the beginning of the autumn term under the direction of the committee on high schools, but pupils may be admitted to advanced standing at any time. No pupil from any class in a grammar school shall be examined who does not present a satisfactory certificate that he has pursued his studies during vacation."

For non-resident pupils who do not take the manual training course, the tuition is fifty dollars a year. For those who take that course, it is one hundred fifty dollars. In both cases the tuition is payable in advance, one-half at the beginning and the other half at the middle of the school year.

The sessions of the school begin at 8.30 A. M., and for pupils not taking the manual training course, end at 1.30 P. M. For pupils taking that course the sessions end at 2.30 P. M.

The building will accommodate about seven hundred pupils, and there is room at the manual training school building for one hundred fifty pupils. At a comparatively small cost, additional rooms can be secured, as the wings were planned for extension. The plan and description of the building and the course of study are printed in the appendix of this report.

Manual Training School. The "Cambridge Manual Training School for Boys" was founded by Mr. Frederick H. Rindge. It is managed by a board of trustees. The land, the buildings, and the equipment were the gift of Mr. Rindge, and the current expenses of the school are paid by him. Although the manual training school is supported by private munificence, and the mechanical work is carried on under the direction of a superintendent, responsible only to the founder, it is, nevertheless, in its essential features, a part of the public school system. All

who take the regular course are enrolled as pupils of the English high school, and their academic work is carried on under the direction of the principal of that school. The school was opened in October, 1888. The first class numbered sixty-two. At the beginning, the course of study was arranged for three years. In 1893, it was changed to a four years' course. Four classes have graduated; the number of graduates being ninety-six. The number of pupils in the school at the present time is one hundred seventy-eight.

Admission to the school is through the English high school. The tuition for membership to both schools is one hundred fifty dollars payable in advance, one-half at the beginning and the other half at the middle of the school year. The sessions of the school begin at 8.30 A. M., and close at 2.30 P. M. The course of study is printed in the appendix of this report.

Manual Training in the Grammar and Primary Schools. The following is the report of a special committee appointed January 1, 1893, to consider the subject of manual training in connection with all the grades of the city schools: —

In view of the excellence of the equipment and the work at the manual training school in our city, established and maintained by Mr. Frederick H. Rindge, your committee believe that the high school grades are abundantly supplied with opportunities for manual training. They see also no reason to change the work of the kindergartens. Manual training in the grammar grades has been the subject of their investigation.

A number of schools in which manual training could be observed were visited, viz.: The Lincoln school in Brookline, the Eliot school in Jamaica Plain, and the Waltham manual training school, also the school for the instruction of teachers, under the direction of Mr. Gustav Larsson, in Boston. A conference was held with Superintendent Cogswell and with Mr. Harry Ellis, superintendent of the Cambridge manual training school; and the opinions of Mr. Samuel B. Capen, formerly president of the Boston school board, and of Mr. Edwin P. Seaver, superintendent of the Boston schools, were obtained in regard to the work in Boston.

Manual training is undoubtedly beneficial both to boys and to girls, and in order to affect the majority of our children, it must be taught in the grammar schools. Its value is both educational and economic. The boy who quickly tires of books, and to whom the study hour is

irksome, is frequently successfully appealed to, and his mind awakened when his hands work with his head, when he has to do with the concrete as well as with the abstract, when the making of an object and not the reading of a paragraph is the means used to increase his stock of knowledge and to develop his powers.

Through handcraft the creative faculty, so often dormant in the pupils of our city schools, is revealed to the pupil, who discovers that he can make as well as acquire, — an important discovery in this world of struggle and competition. Certain pupils to whom shop work is attractive remain in school longer than they could be persuaded to, were the work wholly confined to books. To such, who may be said to have a mechanical bent, manual training offers an opportunity for development to a degree which would probably never be attained without it.

Economically manual training gives familiarity in the use of tools, and a skill to the hands which at times every person finds advantageous. To many it is a valuable stepping-stone in the path of life, while others, whose later vocations are purely literary are broadened and softened by once, at least, having been in touch with those whose lines of life have fallen in very different places; they have seen the dignity of manual labor. Again, the pupil whose nervous constitution is too sensitive to bear the strain of continuous study finds a healthful relaxation and exercise in the work of the bench or the forge.

Of the several systems of manual training, the Swedish or Sloyd, with some changes to adapt it to the American child, is the best. It admits a progressive advancement, and is better suited to the age of our pupils than is the Russian. Because of its educational value, it is even better for girls than cooking and sewing. To obtain the best results the instruction must be given by teachers specially trained, preferably by men. One instructor can handle profitably not more than twenty-four pupils at once at bench work. The pupils of the higher grades should give at least one period of two hours each week. For the primary and lower grammar grades the periods may be shorter. For the higher grades specially equipped rooms must be devoted to the work, and such rooms ought to be in the building in which the pupils receive their other instruction. Time is lost and discipline suffers when the workroom is at a distance from the schoolhouse.

As a basis for estimating the cost of introduction and maintenance of manual training, we may instance the school in Waltham. But one building is fitted for the purpose. Pupils are from the 7th, 8th, and 9th grades. The furnishings and their cost are as follows, viz.: 24 benches, $312; tools, $150; 200 lockers, $150; tool cabinet, $25; total, $637. The annual cost of maintenance of this room, and of another room where a few pupils of high school grades work, including instruction, is

about $2500. In Northampton the expenditure is far less, but the work is very elementary, as the only cutting tool used is the pocket-knife, and the work is done on the ordinary schoolroom desk, protected, when necessary, by a wooden cover. The cost of implements is $1.00, and the cost of the first year's work, including tools, but exclusive of instruction, in a building of nine rooms containing 450 pupils, is $97.50. The instruction is given by the regular teachers under the direction of a specialist. There are two sessions a week, of thirty minutes each. The work begins with the second primary grade.

The committee believe that manual training, as one means of education, has great value, and that within a very few years we should have it in our lower schools. They cannot, however, recommend its immediate introduction. Important changes in the course of grammar school studies, both by addition and by re-apportionment, are yet so recent that neither teachers nor pupils are familiar with them; and it does not seem wise to make others now. The present straitened financial conditions warn us to be cautious in making new expenditures.

They have, therefore, no orders to submit to your consideration; but they strongly urge that you keep the subject ever in mind, and that as soon as practicable our elementary school course be enriched by manual training; and they recommend that, in future, every new grammar schoolhouse be provided with a room suitable for shop work, which shall be reserved for this purpose; also that in any revision of the course in drawing the value of mechanical drawing be fully recognized.

Respectfully submitted,

FREDERIC W. TAYLOR,
F. W. TAUSSIG,
W. H. CLANCY,
CHAS. F. WYMAN.

Wellington (Training) School. This school was opened in September, 1884, and differs from the other schools in this respect, — all the grades, except the eighth and ninth, are taught by young teachers. Their work, however, is done under the immediate supervision of a master and three assistants, who are held responsible for the instruction and management of the school.

The object of conducting a school on this plan is to give the Cambridge young women who desire to teach, and who have made special preparation for the work, an opportunity to gain experience under conditions favorable to their own success, and without prejudice to the interest of their pupils.

Graduates of the English high school or of the Latin school,

who have also graduated from one of our State normal schools or from the Boston normal school, are preferred candidates for the position of teacher in this school. Other persons of equal attainments may be elected.

The required term of service is one year; but teachers may be excused or dismissed at any time by the committee on the training school.

The money compensation for the service is two hundred dollars. Teachers employed after the required term of service are paid at the rate of three hundred dollars per annum.

The school contains all the grades of the grammar and primary schools, the number of pupils being about seven hundred. It is expected that a kindergarten will soon be opened in connection with this school.

The cost of the school depends on the number of pupils. The limitation is, that the cost per pupil shall not exceed the average cost of pupils in the other schools of the same grades.

By the rules of the school board, the committee on the training school is authorized to employ six teachers, at a salary not exceeding four hundred dollars per annum, to act as substitutes in the grammar and primary schools, and, when their services are not so required, to work in the schools to which they shall be assigned by the superintendent; the amount received by each teacher as a substitute to be deducted from her salary. These teachers are usually assigned to the training school, that there may be at that school a sufficient number of teachers to make it practicable for the members of the training class to visit other schools of special excellence.

In regard to the establishment of a kindergarten, the views of the committee in charge of the school will be seen by the following extract from their annual report: "Your committee feel that a kindergarten would be of very great service to both the children and the teachers. The children would be taken out of the streets and come under the good influences of the school at least a year earlier, and they would learn the first lessons in obedience and acquire some habits of orderliness and cleanliness and courtesy; they would begin to practise the arts of listening and of answering before they had to attack the

serious problems of reading, writing, and arithmetic; and the young primary teachers would feel the effect of this training, and perhaps be helped to a firmer and gentler form of government in their own rooms, and to a more systematic method of teaching by the presence of a busy, orderly, happy kindergarten; and it is reasonable to hope that they might be kept to the level of their best by the unconscious expectation of the children that the happy, active, obedient life that they were used to in the kindergarten was to be continued in the upper school. In the meantime, the master and his assistants would have the best possible opportunity of studying the relation of the kindergarten to the lowest primary grade, and perhaps be able to throw some new light on one of the new problems of education which is now confronting us."

Grammar Schools. The number of pupils in these schools on the first of December was five thousand four hundred ninety, and the number of teachers, including masters and special teachers, was one hundred forty-two. The pupils occupied one hundred twenty-three rooms, an average of nearly forty-five to a room. The average number of pupils to a teacher, the masters and the special teachers being included, was a little less than thirty-nine. The cost of instruction for each pupil for the year has been eighteen dollars forty-eight cents. This does not include the cost of supervision.

The course of study is for six years, but the schools are so classified as to give the pupils an opportunity to complete the course in four years or in five years. The average age of the pupils who entered last September was nine years ten months. The number of graduates was five hundred sixty-three, their average age being fourteen years eleven and a half months. Of these, ten per cent completed the course of study in four years, thirty-two per cent in five years, forty-two per cent in six years, and sixteen per cent in seven or more years.

Pupils are admitted by classes from the primary schools at the beginning of the autumn term; but individual pupils are admitted at other times, if it is deemed advisable by the subcommittee or the superintendent.

Promotions to the high schools, and from grade to grade in the grammar schools, are made by the teachers under the direction of the masters and the superintendent. No regular preannounced examinations are held in these schools, but the results of such written exercises and written reviews as the teachers hold from time to time are used as a part of the basis of promotion.

The thoroughness with which the work is done in any school is shown in part by the ability of the pupils to do the work in the high schools. The pupils are admitted to the high schools on trial; and by a rule of the high school committee, any pupil who fails to maintain a suitable rank is reported to that committee, and no pupil thus reported can continue in either high school except by a special vote. Pupils not permitted to remain in the high schools have the privilege of going back to their respective grammar schools, and of returning to either high school at the beginning of the next school year.

In the grammar schools special teachers are appointed to help forward such pupils as seem able to do the work in less than six years, and to aid those who without personal instruction would require more than six years. In the opinion of the superintendent this is one of the most important actions of the Board during these recent years. It removes the most serious objection to the graded system of schools. Equally valuable, it seems to him, would be the services of such a teacher in the English high school. The change from the work in the grammar schools to that in the high schools is the most difficult one made by the pupils in their whole course of instruction. In the grammar schools the pupils are working under the constant guidance of their teachers. In the high schools the teachers meet their pupils for instruction only during the hour of recitation, while even more than in the grammar schools the pupils need the aid of a teacher in the preparation of their lessons, most of their studies being new to them. With this aid many a pupil who now becomes discouraged and disheartened and perhaps drops out of school, or fails of promotion at the end of the year, would be able to do the work successfully, and be greatly benefited by it.

No change has been made in the course of study, except that the work in geography for the fourth and fifth grades has been more definitely fixed by the introduction of Frye's primary geography, and in one school at least the subject of mental arithmetic has been made more prominent. The study of geometry and physics has been continued, and the results have been satisfactory.

The following account of the work in physics, prepared by Mr. Frederick S. Cutter, master of the Peabody grammar school, for Professor Hall's "Elementary Lessons in Physics," shows the details of the work as carried on in that school during the past year: —

The time allotted to physics was one hour a week throughout the year, of which half an hour was for laboratory work and half an hour for recitation in the classroom. For the work in the laboratory the class was divided into divisions of 16 pupils or less. While one division was at work in the laboratory under an assistant teacher, the other pupils of the class were reciting or studying under the direction of the teacher of the classroom. Thus for a class of 48, for a half-hour lesson in the laboratory, the assistant teacher used an hour and a half, while for a class of 56 or 60 two hours were required. In my own school, in which the class numbered 60 pupils, the following was the program: —

Division.	2–2.30.	2.30–3.	3–3.30.	3.30–4.
I	Laboratory	*Geometry	*Reading	Study
II	Geometry	Laboratory	Study	Reading
III	Geometry	Study	Laboratory	Reading
IV	Study	*Geometry	*Reading	Laboratory

* Recite together.

It will be seen that during each of the four periods two divisions together were taught by the teacher of the classroom, and one division was engaged in study. Thus the work in no way suffered from giving the laboratory instruction to small divisions. The half-hour for recitation was taken in a following session, when all the divisions were taught together in the classroom by the teacher of physics.

With a class of 48 or less the following program could be used: —

Division.	2–2.30.	2.30–3.	3–3.30.	3.30–4.
I	Laboratory	Study	Geometry	Physics
II	Geometry	Laboratory	Study	Recitation
III	Study	Geometry	Laboratory	

The time for the teaching of physics — and also geometry, which has been introduced — was obtained in the revision of the program by completing the study of geography in the eighth grade, and by some modifications of the work in arithmetic. The one hour a week for physics was supplemented by making written accounts of the experiments a part of the language work. In the making of illustrations, physics was further correlated with the work in drawing.

It was thought at first by some persons that a serious objection to the introduction of laboratory physics into grammar schools, with their large classes, would be the amount of time and labor involved on the part of the teacher in preparation for, and in clearing up after, the laboratory lessons. But I have found that the teacher can be relieved of a large part of this labor by pupils selected from the class who will gladly serve as assistants. In the adjustment of the apparatus for the experiments, nothing should be done for the pupils that they could properly be expected to do for themselves. But in taking from the cabinet, caring for, and putting away, the many articles used, the selected pupils can render valuable assistance. Thus for example, one of my boys had charge of the 16 large glass jars, — the filling with water, the emptying, and the putting away in proper condition. Another pupil had the care of the 16 spring-balances; another, of the over-flow cans; another, of suitable strings and pins etc. It was the duty of one pupil to see that everything needed for an experiment was finally in place, that there might be no needless loss of time on the assembling of a division. In the preparation for an experiment, the names of the articles required were placed upon the blackboard; and the pupils having charge of these articles would see that they were rightly placed in the few moments before the opening of school, so that little or no time for this purpose would be required of the teacher. At the close of school the same pupils would see that everything was clean and dry, and put away in its proper place. The plan of giving to some pupils a share in the management of the work served to increase the general interest and to promote success.

Primary Schools. The primary schools are under the general supervision of a teacher known as a "Special Teacher of Primary Schools," whose work is done under the direction of the superintendent of schools.

The number of pupils in these schools, on the first of December, was four thousand nine hundred seventy, and the number of teachers was one hundred fourteen, being an average of forty-three and six tenths pupils to a teacher. The cost of instruction for each pupil for the year has been thirteen dollars thirty-four cents. This does not include the cost of supervision or of special instruction.

The course of study is for three years. Children five years old are admitted to the first grade at the beginning of the school year, and on the first of March. The average age of those who enter is between five and a half years and six years. Forty-four per cent of the pupils at the present time are in the first grade, twenty-nine per cent in the second, and twenty-seven per cent in the third.

One thousand one hundred fifty-nine pupils graduated last June, at an average age of nine years eight and a half months. Of these, ten per cent completed the course of study in less than three years, fifty-eight per cent in three years, and thirty-two per cent in more than three years.

Pupils are promoted to the grammar schools, and from grade to grade in the primary schools, on the judgment of the teachers, under the direction of the special teacher of primary schools and the superintendent. Promotions by classes are made annually at the beginning of the autumn term; but individual promotions are made at other times, if it is deemed expedient by the sub-committee or the superintendent. During the past year these schools have received for the first time regular instruction in botany, and in the Ling system of Swedish gymnastics. In botany the instruction was given under the supervision of Miss Sarah E. Brassill, and in gymnastics under Miss Clara E. Sheppard.* The course of study is printed in the appendix of this report.

* Miss Sheppard had leave of absence for a few months. During that time her place was filled by Miss Sarah J. Jacobs.

For nearly three years these schools have been under the supervision of Miss Lelia A. Mirick; and under her skilful direction and inspiring influence they have steadily improved both in the character of the work and in the spirit in which the work has been done. The teachers found in Miss Mirick a personal friend, and it was their pleasure to comply with her wishes and to carry out her plans. Miss Mirick, now Mrs. Cutter, carries with her to her new home the respect and esteem of the committee, the superintendent, and the teachers who have become acquainted with her during the thirteen years of her connection with the schools of Cambridge.

Kindergartens. There are now eight kindergartens, a new one having been opened last February in rooms hired by the city at 49 Spruce street, North Cambridge. This school will be removed to the new schoolhouse on Dudley street as soon as that building is completed.

The number of pupils is three hundred eighty-seven, and the number of teachers fifteen. The cost of instruction in these schools the past year has been nearly seven thousand four hundred dollars, or a little more than nineteen dollars a pupil.

It is hoped that during the coming year a kindergarten will be opened in connection with the Wellington (Training) school.

Evening Schools. There are five evening schools, — one high school, and four elementary schools. By the rules of the committee, these schools begin on the second Wednesday of October, and continue every Monday, Wednesday, and Friday evening for fifty evenings. The sessions begin at half-past seven, and continue two hours.

The evening high school is held in the English high school building, and instruction is given in the following subjects: arithmetic, book-keeping, penmanship, English composition, English literature, civics, history, algebra, geometry, phonography, Latin, French, and German. The average attendance of the school for 1893–94 was two hundred sixteen, and the number of teachers was nine. The cost of instruction per pupil was six dollars forty-six cents.

The evening elementary schools occupy rooms in four of the grammar school buildings, — the Allston, Putnam, Shepard, and Webster. The statistics for these schools for 1893–94 are as follows: Average attendance in the Allston school, one hundred two; cost of instruction per pupil, six dollars thirty-one cents. Average attendance in the Putnam school, one hundred forty-four; cost of instruction per pupil, seven dollars six cents. Average attendance in the Webster school, eighty; cost of instruction per pupil, six dollars thirty-four cents. The Shepard school was not opened till last October, and therefore there are no statistics for this school for 1893–94. The greatest hindrance to the prosperity of the evening schools is the irregularity of attendance. More than one-third of the whole number registered attend school less than one-third of the time.

Under the regulations any pupil who is absent three successive sessions, without an excuse satisfactory to the sub-committee or the superintendent, is discharged. This regulation might well be amended by adding the following: And no person whose record in attendance or deportment has been in the past unsatisfactory shall be admitted to an evening school without the permission of the sub-committee or the superintendent. This would prevent a class of persons from joining the schools year after year who derive little or no benefit from them, but whose presence for a few weeks increases the cost of the schools.

Evening Drawing School. This school is under the supervision of the director of drawing for the day schools. It is open fifty evenings during the season, three times a week, beginning about the tenth of October. The school is divided into two classes, the mechanical and the free-hand. In the mechanical class two complete courses are provided, — a three years' course in machine drawing, and a three years' course in architectural drawing. In the free-hand class, provision is made for a three years' course in free-hand drawing, and for a class in moulding in clay. The average attendance of the school for 1893–94 was: Free-hand class, forty; mechanical

class, sixty-three. The cost of instruction per pupil, allowing five hundred dollars of the director's salary for his services in this school, was sixteen dollars twenty-six cents.

Drawing. The Prang system of form-study and color is used in the grammar and primary schools. No drawing books are used until the sixth grade. Color is taught by the use of colored paper in the five lower grades. During the months of May, June, September, and October, the drawing in the grammar schools is from nature.

In the English high school, drawing is compulsory in the first year (entering class) and elective in the second year. No drawing is taught in the third and fourth years of the English high school, or in any class in the Latin school.

Music. Instruction in music by the National or Mason System is given by the regular teachers in all grades, and in the high schools by the director of music. All the schools are under his supervision, and every pupil who is capable of learning to sing is required to give attention to the subject.

Twenty minutes a day in primary, and ten minutes a day in grammar grades are devoted to study, and pupils are taught to sing and sustain their part in reading from the simplest to the most difficult compositions in one, two, three, and four parts.

In the high schools forty-five minutes a week are given to the study of musical form and expression as found in choruses, quartettes, trios, etc., from the standard operas and oratorios.

Sewing. For the past five years sewing has been taught to the girls of the lower grades of the grammar schools. Forty-five minutes have been given to the work once a week in each grade. Two teachers have been employed the full time, and one teacher one-third of the time. The wisdom of introducing sewing into the schools is no longer questioned. The superintendent recommends that the boys of the fourth grade be taught to sew, at least that they be allowed to join the class in sewing, if they show an interest in the work. He also recommends that the committee on sewing be requested to consider

the practicability of introducing cooking into the schools next September, the instruction to be given on Saturdays. As an experiment four classes could be formed, one to meet in each of the following buildings: The Sleeper, the Holmes, the old Latin schoolhouse on Lee street, and the new schoolhouse in Ward Three. These classes should be open to the girls of the eighth and ninth grades.

Vertical Writing. The extent to which vertical writing has been introduced into the schools will be seen by the report and orders adopted by the Board at the meeting in May. The following is the report and the recommendations which were made: —

That in the opinion of the committee on textbooks and courses of study it is inexpedient to proceed at once to the general adoption of the vertical system of writing; but that the evidence as to the probable beneficial effects of the system is so strong that an experimental introduction of it in the Cambridge schools is desirable. The committee therefore recommend, in substitution for the orders referred to it, the following orders: —

I. *Ordered*, That the vertical system of writing be introduced experimentally into the schools of Cambridge for one year, beginning September 1, 1894, in not more than three primary schools, and in the four lower grades of not more than three grammar schools.

II. *Ordered*, That a special committee of three be appointed to take charge of the introduction of the vertical system in conference with the superintendent; to consider the expediency and practicability of engaging a special teacher in the use of this system; to examine and recommend copy books; and to report to the committee at the end of the year.

Teachers — Appointments — Salaries. There are now three hundred twelve teachers in the schools of Cambridge. Of this number twenty-five have been appointed during the year, and fifteen of the twenty-five are graduates of the Cambridge training school.

Among the teachers who have resigned, there is one who entered upon her work in 1849. Forty-five years is a long term of service, but Miss Martha H. Butler taught successfully in the schools of Cambridge for this period. In the report

of the school committee for 1858 were the following words: "The Thorndike Alphabet school goes on year after year in the even tenor of its way, bringing good results at the end of each term. Miss M. H. Butler never relaxes her industry or tires in her work." For thirty-six years longer Miss Butler did go on in the even tenor of her way, bringing good results at the end of each term, never relaxing her industry or tiring in her work.

There is no rule of the school board in regard to the qualifications of persons who may be appointed teachers in the Latin school and in the English high school, but during these recent years only graduates of colleges have been appointed.

No person is eligible to an appointment in the grammar and primary schools who has not had advantages equivalent to a high school course, a normal school course, and a year's experience in teaching. The same qualifications are required for admission to the training school, except the year's experience in teaching.

No person is eligible to an appointment in a kindergarten who has not taken a course of study for at least one year at some kindergarten normal school approved by the committee on kindergartens and the superintendent of schools.

It is the duty of the committee on the examination of teachers to inquire and report as to the qualifications of all persons nominated to be teachers in the grammar and primary schools and in the kindergartens, below the grade of master, before final action on such nominations is taken by the Board.

It is also the duty of this committee to inquire and report to the Board in executive session, as to the success of any teacher in the employment of the city, when so requested by any member of the Board or by the superintendent.

Any member of the Board who is dissatisfied with a teacher shall give notice of such dissatisfaction to the Board; and all further action in relation to such teacher shall be under its direction.

Experience in teaching, whether in or out of the city, may be considered in fixing the salaries of teachers.

For the Latin school and the English high school, all nom-

inations at a salary other than the minimum shall be made only upon the recommendation of a majority of the high school committee.

For the grammar and primary schools, all nominations at a salary other than the minimum shall be made only upon the recommendation of the three members of the ward committee, or of two members and the superintendent.

For the kindergartens, all nominations at a salary other than the minimum shall be made only upon the recommendation of a majority of the committee on kindergartens.

Under the direction of the superintendent, teachers may visit other schools to observe the discipline and instruction. They may be required to attend teachers' meetings or courses of instruction in methods of teaching for one hour a week, unless excused by the superintendent. Such meetings may be held on Saturday morning during term-time, or at such other time, not in school-hours, as the committee on textbooks and courses of study may direct. Meetings held by the superintendent, and meetings called by him, at the request of the director of drawing or the director of music under the authority of the standing committee having supervision of the instruction in these subjects, are in addition to the above requirements.

The salaries of the teachers and school officers are as follows:—

Latin School and English High School.

Head Masters	$3,000 00
Masters	2,000 00
First Assistant	1,050 00
Assistants, first year	700 00
with an annual increase of $50 until $950, the maximum, is reached.	
Temporary Assistants	500 00

Grammar Schools.

Masters	$2,000 00
Sub-Masters	1,000 00
Master's Assistant	700 00
Special Teachers	650 00
Assistants, first year	400 00
Assistants, second year	470 00
with an annual increase of $50 until $620, the maximum, is reached.	

Primary Schools and Kindergartens.

The salaries of the teachers of the primary schools and of the kindergartens are the same as those of the assistant teachers in the grammar schools. The assistants in the kindergartens receive for the first year $400, with an annual increase of $40 until the maximum salary, $520, is reached.

Principals of the primary schools receive, in addition to the regular salary, five dollars a year for each separate class in the schools under their charge, and principals of primary schools of seven or more rooms, who are employed in work corresponding to the duties of special teachers in grammar schools, receive thirty dollars additional salary.

Special Teachers and Officers.

Director of Music	$2,000 00
Director of Drawing	1,700 00
Assistant Teacher of Drawing	800 00
Teachers of Sewing	600 00
Superintendent of Schools	3,000 00
Special Teacher in Primary Schools	1,000 00
Agent of the Committee on Supplies	1,800 00
Truant Officers (four are employed)	900 00
Secretary of the School Committee	300 00
Page of the School Committee	25 00
Secretary and Librarian of the Latin School	400 00
Secretary and Librarian of the English High School	500 00

Truant Officers. Four officers are employed. Their work is done under the direction of a committee of the Board. The city is divided into four districts, and each officer has assigned to him the schools in one district. Among their duties in addition to those defined by the statutes are the following: To visit each school at least once a day; to assist the teachers in enforcing the regulations concerning contagious diseases; to prevent the children from loitering about the school premises; to be in attendance at the evening schools; and in the month of May to take the school census. Monthly meetings of the committee are held to hear the reports of the officers, and decide what action shall be taken in regard to the cases brought before them.

Three truants have been placed on probation by the Court, and eight have been sentenced to a truant school. The Middlesex truant school at North Chelmsford was designated, on

the 19th of December, as the place to which truants and others included in the truant act should be sent. It is hoped and believed that this school, under the management of the excellent superintendent, Mr. Moses A. Warren, will become what every truant school should be, *a real home.* During the year one of the truant officers, Mr. John Collier, has died. The committee, in their annual report, after referring to his death and expressing their appreciation of his services, added: "He was diligent and faithful in the discharge of every duty confided to him."

Contagious Diseases. During the winter of 1893–94, scarlet fever and diphtheria were so prevalent as to lead to the adoption of more stringent rules governing the return of pupils to school who have been exposed to any contagious disease. In January, the following order was adopted by the Board: *Ordered*, That the school board respectfully request the board of health to appoint a competent physician to examine all cases of contagious diseases in houses in which school children live, to keep watch of the course of such cases, and to forward promptly to the secretary of the school board notice of the time at which children who have been sick or quarantined may return to school.

After considerable delay the request was granted, and Dr. Edwin Farnham was appointed the physician "to examine all cases of contagious diseases affecting attendance of children at public schools, and to issue, on behalf of the board of health, the certificates required by chapter 198 of the acts of 1885."

The following is the regulation now in force: No pupil shall be admitted to any school without a certificate from a physician that he or she has been vaccinated. No teacher or pupil shall attend school while any member of the household to which such teacher or pupil belongs is sick with smallpox, varioloid, diphtheria, or scarlet fever, or during the period of two weeks after the death, or recovery, or removal of such sick person; such length of time being certified in writing to the teacher by the physician of the board of health. No teacher or pupil shall be allowed to attend school who is affected with

measles or whooping-cough. Teachers shall have authority to exclude temporarily from school any pupil who may be afflicted with other diseases or eruptions of doubtful character; but all such cases shall be reported at once to the sub-committee having charge of the school.

Lectures on the Weather Maps. During the winter, a series of ten meetings has been held at the Harvard University Museum in Cambridge, where Professor William Morris Davis, assisted by Mr. R. DeC. Ward, met a number of teachers from the grammar schools for the purpose of giving practical instruction in the use of the daily weather maps in the schools, as a means of laying a foundation for a proper understanding of climatology, as it is afterwards encountered in geographical study. These meetings grew out of the action of the New England Meteorological Society in appointing a committee, consisting of Professor William Morris Davis, of Harvard University, Professor Winslow Upton, of Brown University, and Mr. R. DeC. Ward, assistant in meteorology at Harvard and editor of the American Meteorological Journal, "to consider and report upon action that might be taken by or through the Society regarding practical instruction to teachers on the use of the weather maps in schools." The plan proposed by the committee was outlined by Professor Davis to the masters of the Cambridge grammar schools last November, and by them communicated to a limited number of their teachers, who were selected to attend the proposed meetings. The meetings began in November and extended into January. The plan of instruction was based on the outline of the subject given in the Report of the Committee of Ten on Secondary Education, and included brief instruction regarding local weather observation, practical exercises on the preparation and interpretation of weather maps, with some explanation of the relation of the facts that they exhibit to general meteorology. Particular emphasis was given to the importance of advancing slowly, in order that the scholars should really acquire an understanding of the work as it progressed.

As a result of this course, something of elementary observa-

tion of the weather has been begun in several of the schools; outdoor thermometers have been provided, the previous equipment of the schools having been limited to indoor thermometers, which were observed only for hygienic purposes. A number of weather maps were distributed, and outline maps for practice were provided as needed.

Much interest has been shown in the work, and several of the teachers have introduced some systematic instruction in meteorology in their schools.

These lectures have been repeated in Hingham, Mass., and they have proved to be of great help to teachers working along the lines in geography proposed in the report of the Committee of Ten. It is proposed by the committee to offer similar courses during the winter of 1895–96 to teachers in other places. Professor Davis or Mr. Ward will give more definite information in regard to these lectures.

Lectures on Psychology. A course of ten lectures on psychology has been given in the English high school building by Herbert Nichols, Ph. D. These lectures were provided by the "Cantabrigia Club," and were open free to the Cambridge teachers. The interest taken in them has been shown by a large attendance from week to week. These lectures are to be repeated in Boston.

The Public Library and the Schools.

Since 1890, books from the public library have been delivered at the schools once a week for the use of all the grades in the high schools and the three highest grades in the grammar schools. This experiment has been so successful that the restriction as to grades in the grammar schools has been removed, and now the younger pupils will have access to the books of the library, and their general reading will be more directly under the guidance of their teachers.

This action of the trustees is not only another proof of their interest in the schools, but it is a part of a far-reaching plan to bring the library and the people into the closest relation.

The superintendent would do injustice to his own feelings

if he did not refer to her who for more than twenty years was the efficient librarian, and who previous to her connection with the library had been associated with him as an assistant teacher in the Putnam school.

Miss Almira L. Hayward was appointed a teacher in the Putnam school, March 6, 1865. She resigned July 1, 1869, to accept a position in a school at Lookout Mountain, Tennessee. Subsequently she taught in the State normal school of Rhode Island. In 1873, she entered upon what proved to be her life work — her work in the Cambridge public library. She was successful as a teacher, but her preëminent success as a librarian was so conspicuous that her work in the schools was overshadowed. It may be, however, that this work contributed not a little to her greater success in the library. It is certain that she had an abiding interest in the schools, and in many ways rendered them important service. Long will her name be cherished, not only by the superintendent and the teachers, but by the many children who sought her friendly counsel.

On several occasions it has been the privilege of the teachers to have Miss Hayward speak to them of the public library, and suggest ways by which it might become more helpful to the schools. One of these addresses was given only last May. It was my intention at that time to print her paper as a valuable contribution to this report. This seems now especially appropriate, the words then spoken being her last words to the teachers of Cambridge. They were as follows : —

I am very glad of this opportunity to say a word to you on the relation of the schools to the library. We are all educators, and the library is a sort of annex to the schools. A large class come to the library for their light reading, and it is chiefly through the schools, including the college, that our highest work is done. A few words about what the library has to offer you, along the lines of your teaching. First, its reference library, which, we are often assured, is one of the best in the State. During the morning hours there are very few using it; and would it not be a good lesson to the more advanced of your pupils to assign them questions or topics previously, and then come with them to the library some morning and give them a practical lesson in how to use reference books? The librarian would gladly be at liberty to help in any way, if notified beforehand.

We often find the adults who come to use our reference library are "all at sea" till shown what books are most sure to contain the information desired.

Another department you would find useful is our store of foreign photographs, some hundreds in number and affording just the material for an interesting travel talk in connection with history and geography. It may not be known to all of you that in the addition now building we expect to have a children's reading room. This will relieve the larger reading room from the confusion incident upon the presence of so many children, and enable us to give the young people more personal attention.

There can be no doubt that Cambridge children are learning to love books and the library; some of them read too much. Does it not seem to you that two library books a week is enough for the average child under twelve, who is in school and may need some time for home study? What shall we say of the child who takes a new library book each week day, and spends two or three hours of Sunday afternoon at the library?

We have just made up the accounts of the year since the library was opened on Sunday. The total attendance on Sundays was 4,048, and of this number 1,837 were children under fourteen, children, too, who could come and who do come any day in the week. The question of how much good is being done is difficult to answer. When one remembers how unattractive the homes are from which many of these children come, one rejoices that they have the library, and hopes their love for books will lead them to higher and better lives.

You will be glad to know that we have during the past year added many books on elementary science, sure to be of use in the schools as new studies are being introduced. We have recently had prepared a special card list of the books on the natural sciences, and as soon as our funds will warrant the expense we hope to have it printed. As there are more than 400 books, you will see there is no lack of material with which to work. Another special list in preparation relates to civil history, arranged chronologically under countries. This, too, we hope to print in time.

In regard to our basket delivery of books to the schools, let me say how grateful I am for your kind words of appreciation which come to me from time to time. Though obliged to delegate this work to my senior assistant and her helpers, I will at any time gladly advise you as to your choice of books. One favor I would ask of you. Will you each keep a list of the books you find most helpful, and from time to time send me a copy of your list? We sometimes have an opportunity to duplicate books, and are always wishing we knew what the teachers most need for school use. We put in the library twelve copies of "The Century World's Fair Book." They have grown soiled and worn by

constant reading, but we shall gladly buy fresh copies presently. Our greatest difficulty in filling your school orders is to find enough juvenile books on a given topic, South America, for instance. Now there are not more than a dozen juvenile books which relate to this country, and if the Shepard school has secured them, what shall the Allston school do? We have duplicated many books for the schools; have five copies of the Bodley Books and the Zigzag Journeys. Not yet can we afford twenty-five copies. Often we send a book which we think the teacher may read selections from, or sometimes an illustrated book for the help the pictures may give.

The question is often asked: "Do you prefer the teachers should select their own numbers?"

We do, ordinarily, for this reason: The work at the library of discharging the old and selecting and charging the new books must all be done between the hours of 10 A. M. and 2 P. M. in order to have all the baskets delivered before school closes. You can see that anything which saves time at the library is desirable. When you cannot select your numbers, it is a help if with your card you will send ten slips with the name and address written on each.

You will be glad to know that during each of the past two years more than 6,000 books have been sent to the schools, and we often receive inquiries from other libraries as to how we conduct the delivery and whether it pays. I sometimes answer by showing my scrapbook, containing notes of thanks from my friends the teachers.

In closing let me mention a few books you will like to know we have and to tell your pupils about them. First a copy of the "Domesday Book of England," one of the first printed editions. The original of this great census, made under the direction of William the Conqueror in 1086, is kept under lock and key in the Law Records Office in London. The custodian assured two who saw it in 1888 that many more Americans came to see it than Englishmen, and that he thought if he could take the old thick quarto on a travelling exhibition to America he could make money enough to pay off the national debt. Our copy is in four large folio volumes, and many of the high school pupils come to see it when they reach that period in English history.

Another historical book of interest to us is a facsimile of General Washington's account book kept while he lived in Cambridge. One is amused to read such entries as "To cash paid for cleaning the house which was provided for my quarters, and which had been occupied by the Marblehead regiment, £2, 10s. 9d. To cash for recovering my pistols which had been stolen, and for repairing them afterwards, £1, 10s. To barber £1, 10s."

We have in the Memorial library several volumes by Thomas Shepard, first pastor in Cambridge. One of these was published in 1660, and is a collection of sermons on the Parable of the Ten Virgins.

Among our recent purchases is the "Journal of the House of Representatives," when in 1770 it met in Harvard hall, Cambridge. Another treasure which always interests our young visitors is Colonel Higginson's "History of the United States," printed in raised letters for the blind. The collection of autographs loaned us is always interesting, and we are adding to this and our books by Cambridge authors by gifts which will in time give us a valuable collection useful to students of literature. Think of the library and all it contains as so much reserve force, yours to command, to add novelty and enthusiasm to your daily routine.

The First Manual Training School in Cambridge.

The following letter under date of January 4, 1895, was addressed to the superintendent of schools: —

Dear sir, — You were kind enough in 1879 to sanction and approve the design of the Cambridge Industrial School Association to institute a set of lessons at the cost of private individuals, to teach manual labor to boys in the city. And after seven years' experiment you gave your influence when the authorities provided for the continuation of those lessons in the public schools, and accepted the gift of all the tools and apparatus of the association.

I wish now to ask you to do me the favor to place the record of that association in the city archives, so as to preserve the memory of that first attempt to teach the manual arts in the schools; and I have had copied the final report of its proceedings made to the association in 1887, with the hope of its preservation as a piece of history.

I am yours truly,

E. S. DIXWELL.

This first attempt in Cambridge "to teach the manual arts" is so closely related to the work now going on in the public schools, that it seems desirable to the superintendent, not only to comply with the request that has been made, but to print the report with the prominence it so well deserves.

It reads as follows: —

Cambridge Industrial School.

In the autumn of 1879 under the influence of Rev. G. L. Chaney, an association was formed in Cambridge for the pur-

pose of establishing a school for manual training. Such experiment had already in Massachusetts been tried in Gloucester and in Boston. The subject of industrial schools had been agitated abroad and at home. People were convinced that the time had come for beginning such an enterprise, and they looked forward, as their ultimate aim, to the introduction of such training into the public schools of the city.

But in their first steps attention was much occupied by the idea of using such a school as a charity, with the hope of benefiting such poor boys as attended no other school, or were not advancing well in the literary work of the public schools, and who, it was hoped, might be reached and improved or reclaimed by manual training.

The plan was put before the public at a meeting called for the purpose and addressed by gentlemen who had experience in such matters.

A liberal sum was raised by contribution. The city government granted the use of a room in one of their public buildings, which was fitted with proper benches and outfits at the expense of the association. Twelve complete sets of tools suited for wood-working were procured. A suitable teacher, who had been a practical carpenter, was secured; and advertisements were issued for pupils.

Part of those enlisted for the season came from the ranks of the Cambridge Social Union; part came from the Washington grammar school; and part from other applicants drawn by the notices printed in the journals. It was thought best to make some slight nominal charge for tuition; and all were required to pay *one dollar* for the course of *twenty* lessons of two hours each. But it was stipulated that if any lad was unable to pay that amount, he should be aided to earn it either in the school or elsewhere.

Many wealthy citizens also desired their boys to have the proposed lessons; and classes were formed of such pupils, who paid five dollars each.

The lessons were fairly under way on the last of January, 1880. There were six classes of twelve each. The last lesson was given June 16, 1880, to twenty-six pupils.

On reviewing the year's experiment we were led to congratulate ourselves on the result, and to prepare for another season with the benefit of the experience so gained.

The school was begun too late in the season and continued too long. As the lessons were given out-of-school hours, all who were not fully interested in such pursuits found easy excuses for omitting the lesson in order to join in sports, and as the year advanced, such opportunities became more numerous and urgent. So the numbers fell off at the end.

With reluctance the managers were obliged to relinquish the merely benevolent side of their enterprise. Experience showed that the best pupils at the workbench were those who were most attentive and intelligent at their books. The street boys who came to us had no willingness to keep order or to save tools or materials, or to gain information, or to attend to instructions given. Restraint on their rudeness was resented, and kind words were thrown away. It became necessary to have gentlemen present at every lesson to watch delinquents and to assist the teachers. Such idlers withdrew.

The others who remained profited highly by the teaching. All gained ideas and practice which will remain a very useful factor of their being in whatever may be their future walk. Those destined to mechanical pursuits took thus early the first steps to become skilful artisans. And so the association was encouraged to go on. On November 17, 1880, the school was reopened with pupils gathered mostly from the public schools, with a few from the Cambridge Social Union. The number of lessons promised was sixteen, and the number of classes was four. The time devoted to the lessons was, as before, on Wednesday, P. M., and on Saturday; and each lesson continued two hours. The attendance and application of the pupils were satisfactory. To give an idea of the lessons, I will detail what was taught in each of the sixteen lessons.

1. Striking and driving tacks and nails. The proper method of doing this, with practice.

2. Structure of wood. Best method of splitting it and of sawing it from the round log to make it the most useful. Cutting and splitting instruments. Theory and practice.
3. Measuring and sawing.
4. Lining and split sawing.
5. Gauging and sawing.
6. Sharpening and setting planes and planing.
7. Gauging and planing to given dimensions.
8. Mortising and tenoning.
9. Halving and block planing.
10. Rabbeting and dowelling.
11. Joining by double tenoning and slotting.
12. Dove-tailing.
13. Mitering.
14. Key splicing.

15 & 16. Making a box.

These lessons follow to a great extent the manual entitled "Wood Working Tools," published by the Industrial school in Boston.

During this year, 1880–81, boys were charged as before one dollar, but were required to pay in advance, as many of the previous year neglected to pay even such a small sum, and did not give their services in lieu thereof.

During the third year, 1881–82, the number instructed was forty, divided into three classes. The lessons continued to be given in hours usually accounted by boys as playtime.

This year the experiment was made of admitting pupils without fee, with the result that a part of both the parents and the children felt that their hold on the school was slighter than when they had to pay so small a sum as one dollar for the whole course of lessons. Still, a majority of the pupils made good progress, and it was remarked by the teacher that the discipline was excellent; and twenty-two of the whole number enrolled their names for the privilege of attending the following year.

On opening the school the next year, 1882–83, there were three classes, — one composed of the former pupils and put to

advanced lessons, and two classes of beginners. These last were put through the same elementary training as their predecessors, and the advanced class took lessons of a higher character, drawn from the Manual before referred to (as published by the Boston Society); and at last they were put to laying out and preparing a miniature house frame, which enabled them to realize the use of all their previous training. They showed keen interest in their work, giving voluntary extra time to complete their task, and had extra time from the teacher. Nearly all desired to engage places for another winter, and expressed a desire for lessons in their summer vacation.

Accordingly, the experiment was tried of a vacation school during the summer of 1883. Fifteen entered their names, and ten remained through several weeks with good results to them, but making a drain on the treasury discouraging for future experiments of that kind.

In 1883–84, on the opening of the regular session of the school in the autumn, there were eight advanced pupils who attended to the close of the term, and a class of beginners, eight of whom continued to the end. The instruction was like what had been before given.

There had hitherto seemed much difficulty in advertising in such way as to reach pupils or parents. Whether a small charge was made, or the lessons were gratuitous, the majority of the boys did not care to give their play hours to a school even of this unusual kind.

From these causes the number of pupils had diminished. So, during the winter of 1884, arrangements were made with the school committee, with the sanction and coöperation of the superintendent of schools and of the teachers of the grammar schools, whereby a class of twelve from each school, selected by the teachers, were sent during school hours to receive manual teaching as a part of their school course. These lessons began March 12, 1884, to five classes of twelve each, and were paid for by our association. This may be considered a very important epoch of our school and of the public schools.

These classes received the same lessons, fourteen in number, as had been given to classes gathered previously in other ways.

The attendance and attention were nearly perfect; for the boys considered this school as part of their grammar school, and maintained the same order as they would in that. And accordingly their proficiency was quite satisfactory.

1884–85. The same course was pursued in procuring pupils for the next year, 1884–85, i. e., by draft from the grammar schools, with about the same result. The selection seemed to be made by the teachers of the public schools of those who would most easily make up any loss of time from their book studies arising from these manual lessons. If any one of those selected was evidently falling off in grammar school studies, he was withdrawn from the class; and if any one left the grammar school for any cause, he dropped out of our ranks. When possible, in the early part of our course, the gap was filled by another boy. On the whole, the experiment worked very well, and we felt that benefit was gained and acknowledged.

1885–86. So, the next year, classes were detailed from the grammar schools and one class also from the high school, and the list contained eighty-four lads in seven classes.

Each class received sixteen lessons and were, generally, interested in their work and made marked improvement.

At this time a turning-lathe and its tools were added to the equipment of the school, by the gift of Miss F. M. Mackay, and proved a decided gain, as the boys were eager to learn its use, and some of them became quite expert in turning.

The average attendance from the grammar schools was 95%, and from the high school was 62%. It is to be remarked that the lessons of the high school class took place on Saturday, while their own school was not in session.

At this point it became evident that lessons in manual art could be introduced with good effect into the exercises of the public schools, and with small outlay on the part of the city if tools and workbenches could be furnished. Gentlemen of the school committee were approached, and found to be favorable to the idea of introducing such exercises into the common schools. Rev. Edward H. Hall became our advocate on the Board, and efficiently represented the importance of the meas-

ure, and procured an appropriation of $400 to pay for instruction. Thereupon the Cambridge Industrial School Association offered to the city its whole apparatus for teaching, with the understanding that such methods as they had pursued should be continued in the public schools. Their offer was accepted by the school committee, and the entire apparatus, after being put in the best condition, was made over, January 24, 1887, to the school committee, and subsequently accepted by them and by the city council. And the association thereupon dissolved, having accomplished, as they believed, the object of their organization.

The funds for the expenses of this school have from the beginning been collected by the zeal of a few persevering individuals, all of them ladies, and were supplied by persons residing mostly in Old Cambridge. They were spent by a comparatively few, who saw to their prudent use and who have successfully conducted the enterprise to the desired result.

I would in quitting the subject speak in terms of commendation of the services of our teacher, Mr. M. C. Beedle, who has shown in conducting the lessons great aptness to illustrate and explain the precepts by manual performance, by words, and also by drawings. He has maintained the order of the school, and secured the respect of the pupils.

I will end this history by expressing the hope that a similar benefit may be wrought for the girls. It is notorious that no instruction has been provided in the public schools for sewing. All the teaching in this art, most essential for girls of all ranks in life, has been given for the last twenty-five years or more in Cambridge by voluntary effort of certain young ladies, who have gathered the poor girls and given them lessons, which the mothers were incapable of giving at home, and which were not provided in their daily schools. For fitting these girls for such life as lies before each of them, the use of the needle is a thousand times more essential than some of the branches aimed at in the curriculum of our schools; and its omission is a great error in their mental and bodily training.

[This report was written in 1887. Sewing has been taught in the schools for the past five years.]

IN SCHOOL COMMITTEE, February 21, 1895.

Voted, That the report prepared by the superintendent be adopted as the annual report of the school committee for 1894, and that the secretary be authorized to append the names of the members of the committee thereto.

SANFORD B. HUBBARD,
Secretary.

Members of the School Committee for 1894.

WILLIAM A. BANCROFT, *Chairman ex officio.*

ELLEN A. GOODWIN,	ANNE CLARK STEWART,
WILLIAM TAGGARD PIPER,	EDWARD B. MALLEY,
† ALBERT BUSHNELL HART,	WILLIAM H. CLANCY,
* FRANK W. TAUSSIG,	CHARLES F. WYMAN,
§ PHEBE M. KENDALL,	WILLIAM A. MUNROE,
ROBERT O. FULLER,	MARY E. MITCHELL,
ALPHONSO E. WHITE,	GEORGE P. JOHNSON,
‡ CAROLINE L. EDGERLY,	CAROLYN P. CHASE,

FREDERIC W. TAYLOR.

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* Resigned, Sept. 20.
§ Resigned, March 15.

† Elected, Oct. 9.
‡ Elected, April 3.

FRANCIS COGSWELL,
Superintendent of Public Schools.

APPENDIX.

ORDINANCES

PASSED SINCE THE ADOPTION OF THE REVISED ORDINANCES OF 1892.

An Ordinance in Amendment of an Ordinance Entitled The Executive.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 10 of Chapter 2 of the Revised Ordinances of 1892 is hereby amended by striking out, under the heading of appointments in January, the following: —

"One member of the Board of Aldermen as a trustee of the Public Library.

"One member of the Common Council as a trustee of the Public Library."

[*Approved Dec.* 22, 1892.]

An Ordinance in Relation to the Salary of the Commissioner of Bridges.

Be it ordained by the City Council of the City of Cambridge, as follows: —

On and after the first day of January, 1893, the salary of the Commissioner of Bridges shall be at rate of Seven Hundred Dollars a year.

[*Approved Dec.* 28, 1892.]

An Ordinance in Amendment of an Ordinance Entitled Duties and Salaries.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Section 27 of Chapter 27 of the Revised Ordinances of 1892 is hereby amended by inserting in the third line after the word "mayor," the words "president of the Board of Aldermen."

As amended, this section will read as follows : —

SECT. 27. No carriage shall be furnished at the expense of the city, except upon an order therefor signed by the mayor, the president of the Board of Aldermen, the president of the Common Council, or the acting chairman of any committee of the City Council; and such order shall state the purpose for which the carriage is required, and shall accompany the bill therefor as a voucher.

[*Approved Dec.* 28, 1892.]

An Ordinance in Relation to the Salary of the Assistant City Clerk.

Be it ordained by the City Council of the City of Cambridge, as follows : —

The salary of the assistant city clerk shall be at the rate of Fourteen Hundred Dollars a year, the same to date from the first day of March, A. D. 1893.

[*Approved March* 22, 1893.]

An Ordinance in Relation to the Inspection of Provisions and of Animals Intended for Slaughter or Kept for the Production of Milk.

Be it ordained by the City Council of the City of Cambridge, as follows : —

SECTION 1. The Department of the Inspection of Provisions and of Animals Intended for Slaughter or Kept for the Produc-

tion of Milk shall be under the charge of the inspector of provisions and animals intended for slaughter or kept for the production of milk. He shall be a skilled veterinary physician, shall be sworn to discharge faithfully the duties of his office, and shall hold his office for the term of one year from the first day of May in the year of his appointment, subject to removal at any time by the mayor and aldermen.

SECT. 2. In addition to the duties required of him by the Public Statutes, and acts in amendment thereof, he shall professionally visit, attend and treat, whenever necessary or whenever requested by the mayor, any and all of the horses owned by the city in the several departments thereof, and shall physically examine and report upon all horses offered for sale to said city.

SECT. 3. He shall annually, in the month of December, and whenever requested by the mayor and City Council, make a full and detailed report of all matters pertaining to his department, with such suggestions as he may deem proper.

[*Approved March* 30, 1893.]

An Ordinance in Relation to the Salary of the Inspector of Provisions and of Animals Intended for Slaughter or Kept for the Production of Milk, and of the City Veterinary Physician.

Be it ordained by the City Council of the City of Cambridge as follows :—

The salary of the inspector of provisions and of animals intended for slaughter or kept for the production of milk, and of the city veterinary physician, shall be at the rate of Seven Hundred Dollars a year, to date from the first day of March, A. D. 1893.

[*Approved March* 30, 1893.]

An Ordinance in Amendment of an Ordinance in Relation to Ice for Domestic Uses.

Be it ordained by the City Council of the City of Cambridge, as follows :—

Chapter 39 of the Revised Ordinances of 1892 is hereby amended by striking out, in the fourth and fifth lines of Section 1, the words "provisions, and of animals intended for slaughter or kept for the production of milk," and inserting in the place thereof the words, "milk and vinegar," and by striking out all of Section 3 after the word "samples" in the sixth line, and inserting in place thereof the words "and make or cause to be made proper and careful analysis of the same"; and by inserting in the second line of Section 4, before the word "receiving," the words "completing any analysis or," so that said sections as amended will read as follows : —

Section 1. All persons who intend to sell or distribute ice in this city for domestic purposes shall, before the fifteenth day of April in each year, give notice of such intention in writing to the inspector of milk and vinegar, which notice shall state particularly the source or sources from which their ice is taken.

Sect. 3. Some time during the month of April in each year and at such other times as he may deem proper, the said inspector shall examine, or cause to be examined, the ice and the sources of supply of ice which is offered for sale or distribution in this city for domestic use ; and he shall take samples and make or cause to be made proper and careful analysis of the same.

Sect. 4. The said inspector shall, immediately upon completing any analysis or receiving the result of any analysis made by virtue of this ordinance, make a full report to the Board of Health of this city, and file a copy of the same with the city clerk, which reports shall always be open to public inspection.

[*Approved March* 30, 1893.]

An Ordinance in Relation to Street Watering and in Amendment of Section 5 of Chapter 24 of the Revised Ordinances of 1892.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Section 5 of Chapter 24 of the Revised Ordinances of 1892 is hereby amended by inserting in the fifth line after the word "treasurer" the words, "or when authorized by the City Council."

As amended the section will read as follows : —

SECT. 5. The superintendent of streets shall contract with some suitable person or persons for watering any street or streets, when an amount equal to one half the expense thereof has first been subscribed and paid into the hands of the treasurer, or when authorized by the City Council ; but no money shall be paid from said appropriation for any watering not done in pursuance of a contract so made.

[*Approved April* 5, 1893.]

An Ordinance relating to Excavations, Obstructions, and Projections in Streets, and Amending Chapter 24 of the Revised Ordinances of 1892.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Chapter 24 of the Revised Ordinances of 1892 is hereby amended by striking out sections 10, 11, and 12 and substituting the following : —

SECT. 10. No person shall break or dig up the ground or stones in any street, or on any sidewalk, or erect any staging for building, or place or deposit any stone, bricks, timber, or building materials thereon, or otherwise occupy, obstruct, or encumber the same, without first obtaining a written license from the mayor or some person by him authorized for that purpose, and complying in all respects with the conditions of such license.

SECT. 11. The mayor, or any person by him authorized for

that purpose, may grant a license, in writing, to any person for the purpose of building or other lawful purpose to open, occupy, obstruct, or encumber so much and such parts of any street or sidewalk as the mayor, or person authorized by him as aforesaid, shall deem safe and proper, and such license shall specify the time, place, size, and use of such opening, occupation, obstruction, or encumbrance and the time within which the street or sidewalk must be put in good condition, and shall be on condition that the person accepting such license shall put, and at all times keep up, a suitable railing or fence around the section or part of any street or sidewalk so opened, occupied, obstructed, or encumbered; that such person shall place and maintain from the beginning of twilight through the whole of every night, over or near the place so occupied, open, obstructed, or encumbered, and over or near any dirt, gravel, or other material taken therefrom or to be used by him, a light or lights sufficient to protect travellers from injury; that such person shall place and maintain a safe and convenient way for the use of foot-travellers around or over such place; that if such person does not, within the time prescribed in said license, put the street or sidewalk in good condition satisfactory to the superintendent of streets, the person accepting the license shall pay whatever sum the superintendent of streets may expend for putting the street or sidewalk into such condition; that the person accepting the license shall conform to the statutes and ordinances and specifications in the license; that the license may be revoked at any time by the authority issuing it; that the violation of any of its specifications shall work an immediate revocation of the license; that such person shall indemnify and save harmless the city from any damage it may sustain, or be required to pay, by reason of the doing of the work licensed, or by reason of any act or neglect of himself or of any of his employees relating to such work, or by reason of any violation of any specification; and that he shall deliver up the license to an officer of the police force of the city, on or before the expiration of the time fixed in the license for completing such work; such license to be returned by such officer to the Street Department.

The mayor or any person authorized by him may, in addi-

tion to said specifications, specify in the license, or after the issuing thereof, in writing, the kind of rail or fence to enclose the place, and the kind of way over or around such place and the manner of constructing the same, and nothing herein contained shall be construed to prevent the insertion in the license of any other specification deemed advisable by him.

SECT. 12. Whenever any street is opened, occupied, obstructed, or encumbered by any department of the city, or any corporation or person, the superintendent of streets shall prevent any unnecessary obstruction while the work is in progress, and shall see that the street is repaired and put in good order when the work is completed. If the street is not repaired to his acceptance, he shall forthwith put the same in good order, and shall render a bill for the expense of such repair to the department, corporation, or person whose duty it was to repair the street. All openings made in the street for any purpose whatever shall be filled back in layers six inches in depth, and each layer shall be properly rammed, and when necessary shall be wet down to prevent settling of the filling.

Before any license hereinbefore described is delivered to any person for the applicant therefor, such person, unless he is an employee of the city, employed on public work, shall certify that a copy of the permit, entered in a book kept for the purpose, is a correct copy of the license he received; and the applicant, unless the application is made in behalf of a department of the city, or by a person who has given bond and who applies for a license in accordance with the provisions of Chapter 22 of the Revised Ordinances of 1892, shall give a bond in the sum of one thousand dollars, with one or more sureties satisfactory to the mayor or to such person as may be authorized by him to issue the license, conditioned to the faithful observance of the conditions and specifications of every and all licenses issued to the applicant by the mayor or by such other person authorized by him as aforesaid; and the mayor or other person authorized by him as aforesaid may at any time require a new bond which shall be considered a strengthening bond, unless the sureties on the former bond or bonds are expressly released from their liability by a vote of the City Council.

Said Chapter 24 is hereby further amended in Section 13, by striking out the word "twelve" in the fourth line, and inserting in place thereof the word "eleven." As amended, the section will read as follows: —

SECT. 13. Whoever maliciously or wantonly, and without legal cause, extinguishes or diminishes a light fixed in accordance with the provisions of Section 6, or of Section 11, shall be liable to a penalty of not less than ten nor more than twenty dollars.

[*Approved April* 13, 1893.]

An Ordinance in Amendment of an Ordinance in Relation to Duties and Salaries.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 29 of Chapter 27 of the Revised Ordinances of 1892 is hereby repealed.

[*Approved April* 27, 1893.]

An Ordinance in Relation to the Salary of the Inspector of Milk and Vinegar.

Be it ordained by the City Council of the City of Cambridge, as follows: —

From and after the first day of April, 1893, the salary of the inspector of milk and vinegar shall be at the rate of Nine Hundred Dollars a year.

[*Approved April* 27, 1893.]

An Ordinance in Relation to the Rates Charged for the Use of Water.

Be it ordained by the City Council of the City of Cambridge, as follows: —

For the year beginning on the first day of May, 1893, a dis-

count of ten per cent. from the existing rates for water shall be allowed to all consumers, except such as are supplied through meters.

[*Approved April* 27, 1893.]

An Ordinance in Amendment of an Ordinance in Relation to Fire Department.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Section 4 of Chapter 11 of the Revised Ordinances of 1892 is hereby amended by adding at the end thereof the following : —

"There shall be appointed one more driver than those required for the existing engine and hook and ladder companies. The chief engineer may designate one of the drivers in the Fire Department to act as driver of his wagon. Such person shall be constantly employed, and shall at all times be in or about the engine house except when on duty elsewhere, unavoidably absent, or excused from duty by the chief engineer."

[*Approved May* 4, 1893.]

An Ordinance in Amendment of an Ordinance Entitled General Provisions, and Creating a New Department of the City.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Section 16 of Chapter 1 of the Revised Ordinances of 1892 is hereby amended by inserting after the words "Inspection of Milk and Vinegar Department," in the fifteenth line, the words, "Inspection of provisions and animals intended for slaughter or kept for the production of milk."

[*Approved May* 10, 1893.]

An Ordinance in Relation to Plumbing.

Be it ordained by the City Council of the City of Cambridge, as follows:—

Section 1. No person shall do or carry on the business of plumbing in this city unless he first registers his name and place of business in the office of the Board of Health, and notice of any change in the place of business of a registered plumber shall be immediately given to the Board of Health.

Sect. 2. Before doing any work in a building each plumber shall, except in repairs of leaks or other repairs which do not involve the change, substitution, or addition of fixtures or drainage, file in the office of the Board of Health, upon blanks provided for the purpose, a notice and a particular description of the work to be performed. No pipes, tanks, faucets, valves, or other fixtures shall be placed in any building in the city except in accordance with plans or specifications which shall be approved by the Board of Health or such person as the Board of Health shall designate.

Sect. 3. The Board of Health may prescribe rules and regulations, not inconsistent with the ordinances of the city, concerning materials, and the construction, alteration, and inspection of all pipes, tanks, faucets, valves, and other fixtures by and through which water or sewage is used and carried. The Board of Health may likewise make and enforce such regulations as it deems necessary for the safety and health of the people with reference to house drainage and its connection with public sewers, whenever a public sewer abuts the estate to be drained.

Sect. 4. Every building shall have its sewage conducted into a common sewer whenever there is a common sewer near by in the street adjoining the premises upon which such building stands; and whenever in the opinion of the Board of Health it may be necessary as a health measure, upon its order, any drain and any connection with a common sewer shall be reconstructed by the owner thereof and at his expense.

Sect. 5. Such portion of house drains as are outside of

buildings, and extend more than five feet beyond the foundation walls, shall be constructed of cast-iron soil pipe, or of vitrified drain pipe.

SECT. 6. Such portions of house drains as are within buildings, and also such portions as are without, and less than five feet beyond foundation walls, shall be constructed of heavy cast or wrought iron pipe.

SECT. 7. Drain pipes intended to receive the discharge from water closets and other fixtures shall be carried up through, and not less than two feet above, the roof with undiminished internal diameter.

JOINTS AND CONNECTIONS.

SECT. 8. Joints in iron soil pipes, drain and waste pipes, shall be oakum packed, caulked with molten lead, or screw joints. Joints in lead pipes shall be wiped solder joints. Connections of iron and lead pipes shall be by means of brass caulking nipples, and the lead shall be joined to the brass by wiped joints, and the nipple shall be securely caulked into the iron pipe or fitting.

TRAPS.

SECT. 9. Each water closet and urinal shall be provided with a separate trap, which shall be placed within three feet of the same; and unless otherwise specially authorized by the Board of Health, each wash bowl, set of wash trays, slop-hopper sink, bath tub, or other plumbing fixtures shall be similarly trapped.

SECT. 10. Each main drain shall be provided with a running trap of size not less than the internal diameter of the drain. Such traps may be placed either within or without the foundation walls.

VENTILATION.

SECT. 11. Each trap shall be protected from syphonage or air pressure by a special air pipe, which shall be carried into the open air or connected with the soil pipe above the highest fixture, in either case in such manner as the Board of Health may determine.

SECT. 12. No chimney or hot flue or shaft constructed of sheet iron, brick, or cement shall be used as a ventilator for a trap or drain pipe. Vent pipes shall be constructed of the same material, and in accordance with the provisions of the ordinance governing the construction of drain pipes, and no vent pipe shall be constructed or placed in such manner that it may become trapped or filled by water from condensation or otherwise.

WATER CLOSETS.

SECT. 13. Each water closet and every line of water closets on the same floor shall be supplied with water from a tank or cistern of a capacity not less than four gallons to each closet. This requirement shall not apply to water closets substituted for privy vaults where they are outside of buildings, but such water closets may receive their supply directly from the main, with such fixtures as may be approved by the Board of Health and the Water Board. No pan-closet shall be permitted, and no sluice vault or water closet constructed of brick, cement, or stone.

SECT. 14. Each water closet and urinal shall be locally vented in a hot flue or chimney.

SECT. 15. Waste pipes from refrigerators or other receptacles where food is stored shall not be connected with a drain, sewer pipe, soil pipe, or other waste pipe.

SECT. 16. No steam exhaust pipe shall be connected with a drain, sewer pipe, soil pipe, or other waste pipe unless the exhaust pipe shall be provided with a condenser.

SECT. 17. Each rain water leader connected with a sewer shall be separately trapped, and any portion which may be within a building, or immediately without the wall, shall be constructed of the same material and in the same manner as other drain pipes. They shall in no event be used to drain other than rain water.

SECT. 18. No cellar bottom or area shall be connected with a public sewer without special permit from the Board of Health, and then only under such conditions and regulations as said board shall in each particular case prescribe.

SECT. 19. Before being used or covered up, all drainage and ventilation work shall be submitted to the water test by the plumber in the presence of the Board of Health or some person by them authorized or appointed, and all defects or work otherwise not in accordance with these regulations removed. Notice that the work is sufficiently advanced for inspection shall be sent to the office of the Board of Health by the plumber.

SECT. 20. Whoever violates any provision of this chapter shall be liable to a penalty of not more than fifty dollars for each offence.

SECT. 21. Sections 55 to 67 inclusive, of Chapter 13 of the Revised Ordinances, are hereby repealed.

[*Approved May* 10, 1893.]

An Ordinance in Relation to the Salaries of Certain Permanent Members of the Fire Department.

Be it ordained by the City Council of the City of Cambridge, as follows : —

SECTION 1. The salaries of captains of hook and ladder companies, drivers, and enginemen hereafter appointed shall be as follows : —

Captains of hook and ladder companies:	
First twelve months of service	$880 00
Second twelve months of service	980 00
After two years of service	1,080 00
Enginemen of steam fire engines:	
First twelve months of service	1,000 00
Second twelve months of service	1,100 00
After two years of service	1,200 00
Drivers in Fire Department and enginemen of chemical engines:	
First twelve months of service	820 00
Second twelve months of service	920 00
After two years of service	1,020 00

[*Approved May* 24, 1893.]

An Ordinance in Amendment of an Ordinance Entitled Inspection and Supervision of Electric Wires.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Chapter 14 of the Revised Ordinances of 1892 is hereby amended as follows : —

Strike out all after the word " fixtures " in the ninth line of Section 23, and add the following words : " And of all the conditions, terms, and provisions contained in the order and the ordinances of the city and future amendments thereof, and agreeing to carry out, observe, perform, and be subject to the same ; and in default of such written acceptance and agreement, the permission and grant of location shall be void. Such grant and permission shall likewise be void and deemed revoked unless within six months after the date of the order the posts, conduits, and other fixtures shall have been completed and erected, and the electric line constructed and put in operation thereon ; and whenever the operation of the electric lines upon any location granted shall be discontinued for six months, the grant shall cease and be of no further effect."

As amended, this section will read as follows : —

Sect. 23. Whenever permission shall be granted by the Board of Aldermen to erect and maintain posts, or to construct conduits or other fixtures in the public ways, bridges, or grounds to support or hold lines or wires for the transmission of electricity, the party to whom such permission is granted shall, within thirty days from the date of the order granting such permission, file in the office of the city clerk a written acceptance of the location of such posts, conduits, or other fixtures and of all the conditions, terms, and provisions contained in the order and the ordinances of the city and future amendments thereof, and agreeing to carry out, observe, perform, and be subject to the same ; and in default of such written acceptance and agreement, thepermission and grant of location shall be void. Such grant and permission shall likewise be void and deemed revoked unless within six months after the date of the order the posts, conduits,

and other fixtures shall have been completed and erected, and the electric lines constructed and put in operation thereon; and whenever the operation of the electric lines upon any location granted shall be discontinued for six months, the grant shall cease and be of no further effect.

After Section 31, insert the following sections, viz.: —

SECT. 32. All posts in sidewalks shall be set upon the outer edge thereof and, wherever there are curbstones, placed against the inner edge of the curbstone at the level of the sidewalk. Posts for telegraph, telephone, and electric light lines shall be of hard pine, square at the surface of the ground, and planed and chamfered.

SECT. 33. All permissions granted by the Board of Aldermen to erect and maintain posts, or to construct conduits or other fixtures for electrical lines, in the public ways, bridges, or grounds, may at any time be revoked by the Board of Aldermen, either in whole or in part, and the said board may order the removal of such posts, conduits, fixtures, wires, and lines as it deems necessary; and whenever any posts, conduits, fixtures, lines, and wires are so ordered to be removed, such removal shall be done by and at the expense of the owner, in conformity with the order, within thirty days after notice, or the Board of Aldermen may cause the removal to be done and the expense thereof to be repaid to the city by the owner.

Sections 32 and 33 of said chapter, as heretofore numbered, to be renumbered Sections 34 and 35, respectively.

[*Approved June* 29, 1893.]

An Ordinance in Amendment of an Ordinance Entitled General Regulations for Streets, Commons, Reservoirs, and other Public Places.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Chapter 44 of the Revised Ordinances of 1892 is hereby amended in the following sections, viz.: —

In Section 3, by adding the clause, "and no person shall publicly exhibit any animal in the streets or public places of the city except in accordance with a permit from the superintendent of streets or a license from the Board of Aldermen."

In Section 33, by adding the clause, "and no person other than an employee of the city engaged in its work shall pick over or otherwise disturb any refuse material, house dirt, or ashes set out in the streets or sidewalks for collection by the city, or deposited by the city on any dumping-place, except in accordance with a permit from the Board of Health."

As amended, the several sections before enumerated will read as follows: —

SECT. 3. No owner or person having the care of any domestic fowls or any goats, sheep, swine, horses, oxen, cows, or other grazing animals shall permit or suffer the same to go at large, or to graze on any street; and no person shall publicly exhibit any animal in the streets or public places of the city except in accordance with a permit from the superintendent of streets or a license from the Board of Aldermen.

SECT. 33. No person shall shake or otherwise clean a carpet on any common or other public grounds; and no person shall commit a nuisance thereon; and no person other than an employee of the city engaged in its public work shall pick over or otherwise disturb any refuse material, house dirt, or ashes set out in the streets or sidewalks for collection by the city, or deposited by the city on any dumping-place, except in accordance with a permit from the Board of Health.

[*Approved June* 30, 1893.]

An Ordinance in Amendment of an Ordinance Entitled Streets.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 33 of Chapter 24 of the Revised Ordinances of 1892 is hereby amended by adding the following thereto: —

"And no clothes dryer or clothes line, and no clothes or garments shall be hereafter placed or hung over a sidewalk or within the limits of any street without such permission. All permissions given under this section shall be in writing, signed by the superintendent of streets."

[*Approved June* 30, 1893.]

An Ordinance in Amendment of an Ordinance Entitled General Provisions.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Section 16 of Chapter 1 of the Revised Ordinances of 1892 is hereby amended by inserting in the list of departments, under the words "Overseers of the Poor Department," the words "Park Department."

[*Approved July* 11, 1893.]

An Ordinance Establishing a Park Department.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Section 1. The Park Department shall be under the charge of a board of three persons, to be styled Park Commissioners, who shall be appointed by the mayor, subject to the confirmation of the Board of Aldermen, and they shall hold their offices until the expiration of terms of one, two, and three years respectively, from the first day of May, 1893. The mayor shall, subject to like confirmation, before the first day of May in each year after the year 1893, appoint a commissioner to continue in office for the term of three years from said day. No person shall be a commissioner who is at the same time a member of the City Council. Any vacancy occurring in the said board shall be filled for the residue of the term of the commissioner whose place is to be filled, in the same manner in which such

commissioner was originally appointed. Said commissioners shall, in addition to the above term, hold office until others are appointed in their respective places.

SECT. 2. The president of the Park Commissioners shall be elected by the board, and shall be one of the persons appointed as provided in the first section of this chapter. The board may make such rules and regulations for its own government, and in relation to its officers, as may be deemed expedient.

SECT. 3. The board so constituted shall have and exercise all the rights, powers, and authority given to it and to the City Council by the Legislature, by the three hundred and forty-first chapter of the acts of the year eighteen hundred and ninety-two, and by the three hundred and thirty-seventh chapter of the acts of the year eighteen hundred and ninety-three, and by any acts in addition to either of said acts which may hereafter be enacted, so far as the same can be legally delegated by the city, subject to all the duties, liabilities, and restrictions in said last named chapter contained. Said commissioners may in their discretion annually appoint a superintendent, a clerk, and all other subordinate agents and assistants, who shall be removable at their pleasure, and shall fix their compensation subject to the approval of the Committee on Finance.

SECT. 4. The board, on or before the fifteenth day of December in each year, shall present to the City Council a report containing a statement of the condition of all the parks and lands under its control or supervision, and of other property connected therewith, with an account of all receipts and expenditures, together with any information or suggestions which it may deem important; and if a superintendent has been appointed, it shall at the same time transmit to the City Council his report.

SECT. 5. The board may sell such of the personal property connected with said parks or lands as it may deem expedient, subject to the approval of the mayor.

SECT. 6. The president of the board shall exercise a general supervision over all said parks and lands, and the materials and property connected therewith, and over all subordinate officers and agents. In case of his absence or disability, his duties

may be performed by a president pro tempore, to be chosen by the board.

SECT. 7. No member of the board, and no person appointed to any office or employed by virtue of this chapter or of the acts of the Legislature mentioned in the third section of this chapter, shall be interested, directly or indirectly, in any contract, bargain, sale, or agreement, in relation to said parks or lands, or any matter or thing connected therewith, wherein the city is interested; and any and all contracts, bargains, sales, or agreements, made in violation of this section, shall be void as to the city.

SECT. 8. The superintendent shall perform all such services in relation to said parks and lands as may be required of him by the board, and he shall annually, during the first week of December, present to the board a report of the general condition of said parks and lands.

SECT. 9. The board may require the city engineer, either by himself or by his assistants, to perform all work which properly comes within the province and under the direction of a civil engineer, including the making of examinations and surveys, the preparation of statements, plans, profiles, estimates, descriptions, specifications, and contracts, and the measuring of the work done by contract and certifying to the results of such measurement.

[*Approved July* 11, 1893.]

An Ordinance in Amendment of an Ordinance Entitled General Regulations for Streets, Commons, Reservoirs, and other Public Places.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Chapter 44 of the Revised Ordinances of 1892 is hereby amended in the following sections, viz.: —

In Section 16, by adding the clause, "and no person shall

ride a bicycle or tricycle in any street of this city at a rate exceeding eight miles per hour, except in such places and at such times, and under such restrictions as the Board of Aldermen shall designate and require; and no person shall ride a bicycle or tricycle in any street of this city unless there is attached to such bicycle or tricycle a bell, whistle, or other mechanical device, sufficient, when sounded, to warn travellers of its approach. And said bell, whistle, or other mechanical device shall be sounded when such bicycle or tricycle is within twenty feet of any vehicle, horse or foot passenger, travelling in said street.

In Section 25, by adding the word "ride" after the word "drive," in the first line of said section; also after the word "any," in the same line, the word "bicycle"; also after the word "cart," in the second line, by adding the word "tricycle."

As amended, the before mentioned sections will read as follows: —

SECT. 16. No person shall coast in a street upon a sled, except by permission of the mayor; and no person shall ride a bicycle or tricycle in any street of this city at a rate exceeding eight miles per hour, except in such places and at such times and under such restrictions as the Board of Aldermen shall designate and require, and no person shall ride a bicycle or tricycle in any street of this city unless there is attached to such bicycle or tricycle a bell, whistle, or other mechanical device, sufficient, when sounded, to warn travellers of its approach. And said bell, whistle, or other mechanical device shall be sounded when such bicycle or tricycle is within twenty feet of any vehicle, horse or foot passenger travelling in said street.

SECT. 25. No person shall drive, ride, wheel, or draw any bicycle, coach, cart, tricycle, or other carriage, or permit any horse, cattle, swine, or sheep under his care to go upon any sidewalk, except for the purpose of crossing as nearly as may be at right angles to such sidewalk in order to go into or out of some adjoining enclosure; *provided*, that this section shall not apply to children's carriages or sleds containing children and drawn

by hand; nor shall he otherwise occupy, obstruct, injure, or encumber any such sidewalk so as to interfere with the convenient use of the same by travellers.

[*Approved Sept.* 21, 1893.]

An Ordinance in Relation to Plumbing.

Be it ordained by the City Council of the City of Cambridge, as follows : —

SECTION 1. No person shall do or carry on the business of plumbing in this city, unless he first registers his name and place of business in the office of the inspector of buildings, and notice of any change in the place of business of a registered plumber shall be immediately given to the inspector of buildings.

SECT. 2. No person, firm, or corporation, not now engaged in or working at the business of plumbing, shall hereafter engage in or work at said business in this city, either as a master or employing plumber, or as a journeyman plumber, unless such person, firm, or corporation first receives a license therefor, in accordance with the provisions of this ordinance.

SECT. 3. Any person desiring to engage in or work at the business of plumbing, either as a master or employing plumber, or as a journeyman plumber in this city, shall apply to the inspector of buildings, and shall, at such time and place as may be designated by the Board of Examiners hereinafter provided for, to whom such application shall be referred, be examined as to his qualifications for such business. In the case of a firm or corporation, the examination and licensing of any one member of the firm or the manager of the corporation shall satisfy the requirements of this ordinance.

SECT. 4. There shall be in this city a Board of Examiners of plumbers, consisting of the chairman of the Board of Health and the inspector of buildings, who shall be members ex-officio of said board, and serve without compensation, and a third member, who shall be a practical plumber. Said third member shall be appointed by the Board of Health for the term of one

year, from the first day of May in the year of appointment, and thereafter annually before the first day of June, and shall be allowed a sum not exceeding five dollars for each day of actual service, to be paid from the city treasury.

SECT. 5. Said Board of Examiners shall, as soon as may be after the appointment of said third member, meet and organize by the selection of a chairman, and shall then designate the times and places for the examination of all applicants desiring to engage in or work at the business of plumbing. Said board shall examine said applicants as to their practical knowledge of plumbing, house drainage, and plumbing ventilation, and, if satisfied of the competency of the applicant, shall so certify to the inspector of buildings. Said inspector shall thereupon issue a license to such applicant, authorizing him to engage in or work at the business of plumbing, either as master or employing plumber, or as a journeyman plumber. The fee for a license for a master or employing plumber shall be two dollars; for a journeyman plumber it shall be fifty cents; said licenses shall be renewed annually upon the payment of a fee of fifty cents. A license issued by a board of health or inspector of buildings having competent jurisdiction in some other locality within the Commonwealth, may be renewed by the inspector of buildings in case the person, firm, or corporation to whom the license was issued removes from such jurisdiction and desires to engage in or work at the business of plumbing in this city.

SECT. 6. The inspector of buildings shall appoint one or more inspectors of plumbing, who shall be practical plumbers, and who shall hold office until removed by said inspector for cause which must be shown. The compensation of such inspectors shall be determined by the inspector appointing them, and be paid from the city treasury. Said inspectors shall inspect all plumbing work for which permits are hereafter granted, in process of construction, alteration, or repair; and shall report to said inspector of buildings all violations of any law, ordinance, or by-law relating to plumbing work, and also perform such other appropriate duties as may be required.

SECT. 7. No plumbing work shall be done, except in the case of repairs of leaks, without a permit being first issued therefor

by the inspector of buildings, and no such permit shall be issued unless and until the person, firm, or corporation proposing to do the work shall file in the office of the inspector of buildings, upon blanks provided for the purpose, a notice and a particular description of the work to be performed.

SECT. 8. No pipes, tanks, faucets, valves, or other fixtures, by and through which waste water or sewage is used and carried, shall be placed in any building in the city except in accordance with plans which shall be approved by the Board of Health or such person or persons as the Board of Health shall designate; and before any permit to do the plumbing work described in and by such plans shall be issued, such plans or copies thereof shall be filed in the office of the inspector of buildings, together with a certificate from the Board of Health or person or persons so designated that such plans have been approved by them or him.

SECT. 9. The owner of every building shall have its sewage conducted into a common sewer whenever there is a common sewer near by in the street adjoining the premises upon which such building stands, and if there is no such sewer, into a proper cesspool. And whenever, in the opinion of the Board of Health, it may be necessary as a health measure, upon its order, any drain and any connection with a common sewer, and any cesspool shall be reconstructed by such owner at his expense.

SECT. 10. Such portions of house drains as are outside of buildings, and extend more than five feet beyond the foundation walls, shall be constructed of cast-iron soil pipe, or of vitrified drain pipe.

SECT. 11. Such portions of house drains as are within buildings, and also such portions as are without, and less than five feet beyond foundation walls, shall be constructed of heavy cast-iron pipe.

SECT. 12. Drain and connecting ventilating pipes shall be of sufficient size, and shall be properly secured by irons to walls, laid in trenches to uniform grade, or suspended to floor timbers by strong iron hangers. Every drain pipe shall be supplied with a running trap of size not less than the internal diameter of the drain, placed with an accessible clean-out at or near the

point where it leaves the building, and shall have a proper fall. Drain pipes shall be carried above the roof, open and undiminished in size, and to a sufficient height, not less than two feet above the roof, and not less than five feet above top of any window within fifteen feet. Changes in direction shall be made with curved pipes; and all connections, with horizontal or vertical pipes, shall be made with Y branches. All drain pipes shall be exposed to sight where practicable, within the building, and shall not be exposed to pressure where they pass through walls. Every part of every drain pipe below a cellar floor shall be laid in a brick trench with a concrete base, and shall be accessible through sufficient unattached covers.

SECT. 13. Joints in iron soil pipes, drain and waste pipes, shall be oakum packed, and caulked with molten lead. Joints in lead pipes shall be wiped solder joints. Connections of iron and lead pipes shall be by means of brass caulking nipples, and the lead shall be joined to the brass by wiped joints, and the nipple shall be securely caulked into the iron pipe or fitting.

SECT. 14. The waste pipe of each and every sink, basin, bathtub, urinal, water closet, slop-hopper, and of each set of trays, or other fixtures, shall be furnished with a separate trap, which shall be placed as near as practicable to the fixture that it serves, except as hereinafter provided. One trap shall be permitted to serve for one set of wash trays and a sink, or one bathtub and a wash bowl, *provided* that the distance between said fixtures is not greater than two feet, and the diameter of the trap is not less than four inches. Traps shall be protected from syphonage or air pressure by special cast-iron pipes of a size not less than the waste pipes they serve, placed outside or below the trap. Lead air pipes may be used only when they are exposed to view. Air pipes for water-closet traps shall be of two-inch bore, if thirty feet or less in length, and of three-inch bore if more than thirty feet in length. Air pipes shall be run as direct as practicable. Two or more air pipes may be connected together with a drain pipe, but in every case of connection with a drain pipe such connection shall be above the upper fixtures of the building.

SECT. 15. No chimney or hot flue or shaft constructed of

sheet iron, brick, or cement shall be used as a ventilator for a trap or drain pipe. Vent pipes shall be constructed of the same material, and in accordance with the provisions of the ordinance governing the construction of drain pipes, and no vent pipe shall be constructed or placed in such manner that it may become trapped or filled by water from condensation or otherwise.

SECT. 16. Each water closet and every line of water closets on the same floor shall be supplied with water from a tank or cistern of a capacity not less than four gallons to each closet. This requirement shall not apply to water closets substituted for privy vaults where they are outside of buildings; but such water closets may receive their supply directly from the main, with such fixtures as may be approved by the inspector of buildings and the Water Board. No pan-closet shall be permitted, and no sluice vault or water closet constructed of brick, cement, or stone.

SECT. 17. Each water closet and urinal shall be locally vented in a hot flue or chimney, where practicable.

SECT. 18. Waste pipes from refrigerators or other receptacles where food is stored shall not be connected with a drain, sewer pipe, soil pipe, or other waste pipe, and shall be run to some place in open sight.

SECT. 19. No steam exhaust pipe shall be connected with a drain or sewer pipe, soil pipe, or other waste pipe unless the exhaust pipe shall be provided with a sufficient condenser, and unless the exhaust pipe connects with such drain or sewer pipe, soil pipe, or other waste pipe, at a point between the running trap, required by Section 12, and the sewer or cesspool.

SECT. 20. Each rain water leader connected with soil or drain pipes or a sewer, shall be separately trapped; and any portion which may be within a building, or immediately without the wall, shall be constructed of the same material and in the same manner as other drain pipes. They shall in no event be used to drain other than rain water.

SECT. 21. No cellar bottom or area shall be connected with a public sewer without special permit from the Board of Health, and then only under such conditions and regulations as said board shall in each particular case prescribe.

SECT. 22. Pipes and other fixtures shall not be covered or concealed from view, or used until inspected by an inspector of plumbing and approved by the inspector of buildings. All defects of work otherwise not in accordance with these regulations shall be removed. Notice that the work is sufficiently advanced for inspection shall be sent to the office of the inspector of buildings.

SECT. 23. Before being used or covered up all work must be tested in the presence of an inspector of plumbing with the water test.

SECT. 24. Whoever violates any provision of this chapter shall be liable to a penalty of not more than fifty dollars for each offence.

SECT. 25. The ordinance passed May 9, 1893, approved by the mayor May 10, 1893, entitled "An Ordinance in Relation to Plumbing," is hereby repealed.

[*Approved Nov.* 23, 1893.]

An Ordinance in Amendment of an Ordinance Entitled Truants.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Chapter 34 of the Revised Ordinances of 1892 is hereby amended in Section 1, as follows : —

In the third line after the word "places," by inserting the words "of Cambridge"; also in the seventh line, after the word "to," by striking out the remainder of the section, and inserting in place thereof the following words : "either of the suitable places hereinafter designated, for a term not exceeding two years. The Almshouse of the City of Cambridge, the State Primary School, and the Middlesex County Truant School are the places provided for the confinement, discipline, and instruction of such children."

As amended, this chapter will read as follows : —

CHAPTER 34.

TRUANTS.

SECTION 1. Any minor, between the ages of seven and

fifteen years, convicted of being an habitual truant, or wandering about the streets or public places of Cambridge, having no lawful occupation or business, not attending school, and growing up in ignorance, and such children as persistently violate the reasonable rules and regulations of the common schools, shall be committed to either of the suitable places hereinafter designated for a term not exceeding two years. The Almshouse of the City of Cambridge, the State Primary School, and the Middlesex County Truant School are the places provided for the confinement, discipline, and instruction of such children.

[*Approved Jan.* 12, 1894.]

An Ordinance in Amendment of an Ordinance in Relation to Fire Department.

Be it ordained by the City Council of the City of Cambridge, as follows :—

Section 12 of Chapter 11 of the Revised Ordinances of 1892 is hereby amended, as follows :—

In the first line after the word "company," by inserting the words, "except the company in charge of the Hayes truck so-called."

At the end of the second line, after the word "laddermen," by adding the words, "The company in charge of the Hayes truck, so-called, shall consist of a captain, lieutenant, driver, tillerman, and not more than four laddermen."

In the eighth line, after the word "driver," by inserting the words "and tillerman."

In the eleventh line, by striking out the word "He" and inserting in place thereof the words "The driver."

In the thirteenth line at the end of the section, by adding the words, "The tillerman shall operate the tiller of the Hayes truck, so-called, and shall also perform such other duties as may be assigned to and required of him by the chief engineer."

As amended the section will read as follows: —

Sect. 12. Each hook and ladder company, except the company in charge of the Hayes truck, so-called, shall consist of a captain, lieutenant, driver, and eleven laddermen. The company in charge of the Hayes truck, so-called, shall consist of a captain, lieutenant, driver, tillerman, and not more than four laddermen. The captain and lieutenant shall be nominated by the chief engineer for appointment by the mayor and aldermen. The captain shall at all fires have charge and direction of his company. The lieutenant shall assist the captain in the discharge of his duties, and also act as clerk of the company. The driver and tillerman shall be constantly employed and at all times be in or about the hook and ladder house, except when unavoidably absent, or excused from duty by the chief engineer. The driver shall drive and have charge of the horses, shall keep the stable neat and clean, and perform such other duties as may be required of him by the chief engineer. The tillerman shall operate the tiller of the Hayes truck, so-called, and shall also perform such other duties as may be assigned to and required of him by the chief engineer.

[*Approved Feb.* 23, 1894.]

An Ordinance in Amendment of an Ordinance in Relation to Plumbing.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Section 12 of an ordinance in relation to plumbing, approved Nov. 23, 1893, is hereby amended in the fifth line by inserting after the word "drain" the words "and ventilating."

As amended the section will read as follows : —

Sect. 12. Drain and connect ventilating pipes shall be of sufficient size, and shall be properly secured by irons to walls, laid in trenches to uniform grade, or suspended to floor timbers by strong iron hangers. Every drain pipe shall be supplied with a running trap of size not less than the internal

diameter of the drain, placed with an accessible clean-out at or near the point where it leaves the building, and shall have a proper fall. Drain and ventilating pipes shall be carried above the roof, open and undiminished in size, and to a sufficient height, not less than two feet above the roof, and not less than five feet above top of any window within fifteen feet. Changes in direction shall be made with curved pipes, and all connections with horizontal or vertical pipes shall be made with Y branches. All drain pipes shall be exposed to sight where practicable, within the building, and shall not be exposed to pressure where they pass through walls. Every part of every drain pipe below a cellar floor shall be laid in a brick trench with a concrete base, and shall be accessible through sufficient unattached covers.

[*Approved March* 7, 1894.]

An Ordinance in Amendment of an Ordinance Entitled Sinking Fund.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Section 3 of Chapter 23 of the Revised Ordinances of 1892 is hereby amended by adding in the fifth line, after the words "widening of streets" the words "other than for park and water purposes;" in the sixth line, after the words "ten years" the following, "or for such other periods of time as may hereafter be authorized;" in the eighth line, after the words "thirty years" the following, "All other loans for park and other purposes now and that may hereafter be authorized shall be negotiated for such periods of time as shall not exceed the time or times designated respectively in the act or acts authorizing the same;" by striking out in the seventeenth line thereof the words "outstanding loans," and inserting in their place the words "any such loans and any and all other loans that are now and may hereafter be;" and in the eighteenth line, after the words "two per cent thereof" adding the following, "and on account of loans that may

hereafter be made for forty years, a sum equal to one and one-eighth per cent thereof;" so that said section shall read as follows: —

SECT. 3. All loans for public buildings and lands therefor, for constructing and improving bridges except for Harvard bridge, for taking, raising, and improving low lands, for laying out and paving streets, purchasing public lands, and widening streets, other than for park and water purposes, shall be negotiated for ten years, or for such other periods of time as may hereafter be authorized. All loans for constructing sewers shall be negotiated for not exceeding thirty years. The Harvard bridge loan shall be negotiated for not exceeding thirty years. All other loans for park and other purposes now and that may hereafter be authorized, shall be negotiated for such periods of time as shall not exceed the time or times designated respectively in the act or acts authorizing the same. Bonds issued for all loans shall bear upon their face the purpose for which they were issued.

For sinking funds to redeem at maturity such several authorized loans of the city, there shall be annually appropriated and raised by taxation, on account of loans made for ten years, a sum equal to eight and one-half per cent. thereof; on account of loans made for twenty years, a sum equal to three and one-half per cent. thereof; on account of any such loans, and any and all other loans that are now and may hereafter be made for thirty years, a sum equal to two per cent. thereof; and on account of loans that may hereafter be made for forty years, a sum equal to one and one-eighth per cent. thereof; and all amounts so raised by taxation shall annually, on or before the thirtieth day of November, be paid by the city treasurer to such board. And whenever any payment is so made before the thirtieth day of November, interest shall be paid thereon, by the Commissioners of the Sinking Funds, from the time of said payment until said thirtieth day of November, at such rates as the Committee on Finance shall from time to time determine.

[*Approved March* 7, 1894.]

An Ordinance in Amendment of Certain City Ordinances.

Be it ordained by the City Council of the City of Cambridge, as follows : —

The Revised Ordinances of 1892 are hereby amended in the following chapters, viz. : —

In Chapter 1, Section 9. By striking out the words "superintendent of streets," in the third line, and inserting in place thereof the words "Park Commissioners or the Water Board."

In Chapter 24, Section 2. By striking out in the third line the word "commons," and in the fourth line the words "and enclosures ;" also by inserting in the third line, after the word "bridges," the word "and."

In Chapter 24, Section 3. By striking out the entire section.

An ordinance establishing a Park Department, approved July 11, 1893, is hereby amended by inserting in Section 8, second line, after the word "to," the words "the trees in the public streets and," and by adding the following sections, viz. : —

Sect. 10. The Park Commissioners, in addition to the general care and charge of parks and public grounds imposed upon them by the foregoing provisions, shall have the general care and charge of all the other commons, public grounds, and enclosures now belonging, and as the same may hereafter belong to the city, and not under the general care of the Water Board.

Sect. 11. The Park Commissioners shall have the care of the trees in the public streets. They shall cause all statutes and ordinances made for the protection of said trees, the commons, and other public grounds and enclosures not under the general care and charge of the Water Board, to be strictly enforced, and shall institute legal proceedings against all persons violating such statutes and ordinances.

As amended, the sections of Chapters 1 and 24 of the Revised Ordinances of 1892, before mentioned, and the ordinance establishing a Park Department, will read as follows: —

REVISED ORDINANCES OF 1892.

CHAPTER 1, SECTION 9. The words "public grounds" shall include the commons and all public lands placed by the City Council under the charge of the Park Commissioners or the Water Board, and those parts of public places which do not form travelled parts of highways.

CHAPTER 24, SECTION 2. The superintendent of streets shall, under the direction and control of the mayor, have the general care and charge of the highways, streets, bridges, and public squares belonging to the city, and shall attend to the making, mending, and alteration thereof, and cause the same to be kept in good repair, so as to be safe and convenient for travellers with their horses and carriages at all seasons of the year. He shall place suitable street signs on each street at convenient distances apart. He shall keep the entrances to the catch-basins open, and clear of ice in cold weather, so as to permit the flow of surface water into them. He shall see that the highways, streets, and sidewalks are kept in good order, and that all nuisances and obstructions therein are forthwith removed, or give notice thereof to the mayor or chief of police. And in case of the blockade or obstruction of any street, the person causing such blockade or obstruction shall forthwith notify the superintendent of streets and the chief of police thereof.

SECT. 3. (stricken out).

AN ORDINANCE ESTABLISHING A PARK DEPARTMENT.

Be it ordained by the City Council of the City of Cambridge, as follows: —

SECTION 1. The Park Department shall be under the charge of a board of three persons, to be styled Park Commissioners, who shall be appointed by the mayor, subject to the confirmation of the Board of Aldermen, and they shall hold their offices until the expiration of terms of one, two, and three years respectively, from the first day of May, 1893. The mayor

shall, subject to like confirmation, before the first day of May in each year after the year 1893, appoint a commissioner to continue in office for the term of three years from said day. No person shall be a commissioner who is at the same time a member of the City Council. Any vacancy occurring in the said board shall be filled for the residue of the term of the commissioner whose place is to be filled, in the same manner in which such commissioner was originally appointed. Said commissioners shall, in addition to the above term, hold office until others are appointed in their respective places.

SECT. 2. The president of the Park Commissioners shall be elected by the board, and shall be one of the persons appointed as provided in the first section of this chapter. The board may make such rules and regulations for its own government, and in relation to its officers, as may be deemed expedient.

SECT. 3. The board so constituted shall have and exercise all the rights, powers, and authority given to it and to the City Council by the Legislature, by the three hundred and forty-first chapter of the acts of the year eighteen hundred and ninety-two, and by the three hundred and thirty-seventh chapter of the acts of the year eighteen hundred and ninety-three, and by any acts in addition to either of said acts which may hereafter be enacted, so far as the same can be legally delegated by the city, subject to all the duties, liabilities, and restrictions in said last named chapter contained. Said commissioners may in their discretion annually appoint a superintendent, a clerk, and all other subordinate agents and assistants, who shall be removed at their pleasure, and fix their compensation subject to the approval of the Committee on Finance.

SECT. 4. The board, on or before the fifteenth day of December in each year, shall present to the City Council a report containing a statement of the condition of all the parks and lands under its control or supervision, and of other property connected therewith, with an account of all receipts and expenditures, together with any information or suggestions which it may deem important; and if a superintendent has been appointed, it shall at the same time transmit to the City Council his report.

SECT. 5. The board may sell such of the personal property connected with said parks or lands as it may deem expedient, subject to the approval of the mayor.

SECT. 6. The president of the board shall exercise a general supervision over all said parks and lands, and the materials and property connected therewith, and over all subordinate officers and agents. In case of his absence or disability, his duties may be performed by a president pro tempore, to be chosen by the board.

SECT. 7. No member of the board, and no person appointed to any office or employed by virtue of this chapter or of the acts of the Legislature mentioned in the third section of this chapter, shall be interested, directly or indirectly, in any contract, bargain, sale, or agreement, in relation to said parks or lands, or any matter or thing connected therewith, wherein the city is interested; and any and all contracts, bargains, sales, or agreements made in violation of this section shall be void as to the city.

SECT. 8. The superintendent shall perform all such services in relation to the trees in the public streets and said parks and lands as may be required of him by the board, and he shall annually, during the first week in December, present to the board a report of the general condition of said parks and lands.

SECT. 9. The board may require the city engineer, either by himself or by his assistants, to perform all work which properly comes within the province and under the direction of a civil engineer, including the making of examinations and surveys, the preparation of statements, plans, profiles, estimates, descriptions, specifications, and contracts, and the measuring of the work done by contract, and certifying to the results of such measurement.

SECT. 10. The Park Commissioners, in addition to the general care and charge of parks and public grounds imposed upon them by the foregoing provisions, shall have the general care and charge of all the other commons, public grounds, and enclosures now belonging, and as the same may hereafter belong to the city, and not under the general care of the Water Board.

SECT. 11. The Park Commissioners shall have the care of the trees in the public streets. They shall cause all statutes and ordinances made for the protection of said trees, the commons, and other public grounds and enclosures, not under the care and charge of the Water Board, to be strictly enforced, and shall institute legal proceedings against all persons violating such statutes and ordinances.

[*Approved March* 13, 1894.]

An Ordinance in Amendment of an Ordinance Entitled Cemetery.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Chapter 6 of the Revised Ordinances of 1892 is hereby amended by adding at the end thereof a new section, viz. : —

SECT. 8. Proprietors of lots may, upon forms prescribed by the Board of Cemetery Commissioners, reconvey said lot or lots to the City of Cambridge ; and the Board of Cemetery Commissioners may accept the same, for and in behalf of the City of Cambridge, upon certain trusts in said deed of reconveyance to be expressly mentioned. But in no event shall any such deed of reconveyance be accepted as aforesaid, unless and until there shall be deposited with and held by the city treasurer, in accordance with Section 4 of Chapter 25 of the revised ordinances, a sum sufficient, in the opinion of the Board of Cemetery Commissioners, to provide for the perpetual preservation and care of such lot or lots and their several respective appurtenances, including the care of the grass, resodding, erecting, placing, keeping in repair, and the renewal of any tomb, curb, monument, headstone, and fence now or hereafter to be placed on said lot or lots. Any proprietor, so reconveying any lot or lots as aforesaid to the city, may in said deed reserve to himself and to such as may be beneficiaries thereunder the right of admission and such supervision as to the Board of Cemetery Commissioners may seem proper, and as may not be

inconsistent with the rights which have vested in said City of Cambridge.

[*Approved March* 29, 1894.]

An Ordinance Establishing the Salaries of Assistant Enginemen of Steam Fire Engines and the Tillerman of the Hayes Truck.

Be it ordained by the City Council of the City of Cambridge, as follows: —

The salaries of assistant enginemen of steam fire engines and the tillerman of the Hayes truck shall be at the following rates, viz.: —

For first twelve months of service	$820 00
For second twelve months of service	920 00
For third twelve months of service	1,020.00

[*Approved March* 28, 1894.]

An Ordinance in Amendment of an Ordinance in Relation to Water Works.

Be it ordained by the City Council of the City of Cambridge, as follows :—

Chapter 26 of the Revised Ordinances of 1892 is hereby amended by striking out Section 24 and inserting in place thereof the following: —

SECT. 24. The following rates shall be charged annually for the use of the water, namely: —

DWELLING-HOUSES.

	Per Year.
Occupied by one family, for the first faucet	$4 00
For each additional faucet, to be used by the same family	2 00
Each wash basin	2 00
Each set washtub, with faucet	2 00
When a house is occupied by more than one family, one faucet only being used by all, for each family	3 00

When a house is occupied by more than one family, the highest rates will be charged for each family having the water carried into their part of the house.	
For the first bathtub	$4 00
When used by more than one family, for each family	3 00
For each additional bathtub	3 00
For the first water closet, self-regulating	3 00
When used by more than one family, for each family	2 50
For each additional water closet, self-regulating	2 00
For each water closet, not self-regulating	10 00
When used by more than one family, for each family	8 00
Each slop closet	3 00
When two faucets are used, one for hot and one for cold water, both emptying into one vessel, but one charge will be made for both, and the same rule applies to boarding-houses.	
Provided, That in no case shall the charge for the use of water by a private family, exclusive of water closet, not self-regulating, hose and stable, be more than	15 00
And including stable for not more than four animals, more than	22 00
And including use of hose for stable for not more than four animals, and for garden not exceeding five thousand feet	27 00

APARTMENT HOUSES OR FAMILY HOTELS.

For the use of water in apartment houses or family hotels which are arranged in suites of rooms for different families, the charge to each tenement, exclusive of water closet not self-closing, shall not exceed $14.

[Apartment houses or family hotels, so-called, shall be taken to mean and include dwellings constructed especially for and occupied by three or more families, each tenement being arranged in flats or suites of rooms connected, and having the conveniences of a distinct house, without regard to the location of the water fixtures. All other dwellings occupied by one or more families shall be classed under the head of dwelling-houses.]

BOARDING-HOUSES.

	Per Year.
For the first faucet	$9 00
Each additional faucet	3 00
For the first water closet, self-regulating	9 00
Each additional water closet, self-regulating	3 00
For each water closet, not self-regulating	15 00
Each slop closet	4 00
Bathtub	9 00

STORES, ETC.

	Per Year.
For each tenement occupied as a store, warehouse, or office	$3 00
Where two or more such tenements are supplied from the same faucet, each	2 50
For markets, saloons, workshops, or for purposes not included in any other classification, and not requiring more than an ordinary supply of water taken from one faucet, from	$5 00 to 25 00
For the first self-regulating water closet or urinal used by the occupants of one tenement only	3 00
(Explanation: When a self-regulating water closet and urinal are in one room, but one charge for each tenant shall be made for both fixtures.)	
When used by occupant of more than one tenement, for each	2 50
For water closet, not self-regulating, for single tenement	10 00
Each slop closet	3 00
For water closet, not self-regulating, used by occupant of more than one tenement, for each	6 00
For each additional fixture, one half of the above charges shall be added.	

PRIVATE STABLES.

For first horse	4 00
Each additional horse	2 00
Each cow	2 00

LIVERY, CLUB, AND BOARDING STABLES.

For not exceeding five horses, the same as private stables.	
Each additional horse	2 00

CAR AND OMNIBUS STABLES.

For not exceeding five horses, the same as private stables.	
Each additional horse	2 00

TRUCK AND CART STABLES.

For each horse, if two or more	2 00
The above includes water for washing carriages, omnibuses, and cars, without hose.	
No stable less than	4 00
Where hose is used in any stable, an addition will be made to the above charges, as follows: —	
For the first horse	5 00
For each additional horse	50

HOSE.

For washing windows and other similar uses, including watering gardens of less than 5,000 feet	5 00
For above purposes and for private stable	10 00
For other cases arrangements may be made with the Water Board.	

HOTELS.

For each bed for boarders and lodgers	$3 50
Or special arrangements may be made with the Water Board.	

BATHS.

For public bath, and for each bath in any hotel	10 00
Water closets in public bath-houses	10 00

STEAM-ENGINES.

For each engine, working not over twelve hours a day, for each horse-power	6 00

The board shall have power to ascertain by meter the quantity used in any case, and a meter shall be applied whenever in the judgment of the board it is expedient. The charge for metered water other than for manufacturing purposes shall be at the rate of two cents for each one hundred gallons. (The charge for metered water for manufacturing purposes shall be at the rate of one and one-half cents for each one hundred gallons.) When the water used by any one taker shall amount to more than five million gallons in any one year, commencing with the first day of July, then the charge shall be at the rate of one cent for each one hundred gallons of the excess over that quantity. In no case, however, shall the minimum charge for any metered premises be less than ten dollars per annum.

All bills for water furnished by meters shall be payable quarterly at the office of the city treasurer; and if the same be not paid within twenty days after the end of the quarter, the registrar is instructed to cut off the supply, after sending a special notice that the water will be cut off for non-payment.

When water is required for purposes which are not specified in the foregoing tariff, the rate shall be fixed by the board.

The board shall have power to prevent the erection of yard hydrants, and water shall not be supplied to any water closets unless such water closets are constructed to conform to the Plumbing Ordinances.

This ordinance shall take effect May 1, 1894.

[*Approved March* 29, 1894.]

An Ordinance in Relation to the Salary of the Sealer of Weights and Measures.

Be it ordained by the City Council of the City of Cambridge, as follows : —

On and after the first day of March, 1894, the salary of the sealer of weights and measures shall be at the rate of Nine Hundred Dollars a year.

[*Approved March* 28, 1894.]

An Ordinance in Amendment of an Ordinance Entitled Duties and Salaries.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Section 20 of Chapter 27 of the Revised Ordinances of 1892 is hereby amended by adding at the end of said section the following: "Nor shall any officer or member of a board, unless thereto authorized by the mayor or city council, apply for, object to, or advocate before the Legislature any special act relating to the City of Cambridge."

[*Approved June* 6, 1894.]

An Ordinance in Amendment of an Ordinance Entitled Duties and Salaries.

Be it ordained by the City Council of the City of Cambridge, as follows : —

Section 7 of Chapter 27 of the Revised Ordinances of 1892 is hereby amended in the tenth line by inserting after the word "departments" the words, "and eight hours for bricklayers in the Sewer Department."

[*Approved July* 12, 1894.]

An Ordinance in Relation to Shut-offs in Gas Supply Pipes to Public and other Buildings.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Whenever gas is furnished to any public building hereafter constructed and used as a church, public school, or public hall, or as an apartment or tenement house containing four or more suites of rooms, or as a manufactory when supplied by service pipe of not less than one inch in diameter, there shall be placed a proper shut-off in the supply pipe outside of such building, the expense thereof to be borne by the person or company supplying the gas.

[*Approved July* 26, 1894.]

An Ordinance in Amendment of an Ordinance Entitled Lamps.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Chapter 16 of the Revised Ordinances of 1892 is hereby amended by adding the following new section, viz.: —

Sect. 4. He shall also see that all meters for gas or electricity furnished to the city are in proper condition, and as often as may be necessary he shall test the powers of electric lights furnished to the different departments of the city; and if found to be less than is required by the contract agreement under which such lights are furnished, he shall at once report such fact to the head of the department making such contract or agreement. If in his opinion any change is at such time desirable in the terms under which gas or electricity is furnished to the city, he shall so report to the mayor and to the head of the department to which such gas or electricity is furnished.

[*Approved July* 26, 1894.]

An Ordinance in Amendment of an Ordinance Entitled General Regulations for Streets, Commons, Reservoirs, and other Public Places.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Chapter 44 of the Revised Ordinances of 1892 is hereby amended in the following sections: —

By striking out Section 16, and inserting instead thereof as Section 16, the following: —

"No person shall coast upon a sled on any street of this city without the written permission of the mayor; and without such written permission no person, in any public street or square of this city, shall ride a bicycle or tricycle at a rate of speed exceeding ten miles an hour, and only for the time, and upon such portions of the public ways, streets, or squares aforesaid as may be specified in said permit.

"Such reasonable conditions shall be attached to such permits as the mayor may deem proper, and in accord with the circumstances and for the occasion for which the permits may respectively be granted.

"Between the hours of eight o'clock in the morning and five o'clock in the afternoon, children under the age of fourteen years may use velocipedes on any sidewalk in any public way, street, or square of this city.

"In no part of any public grounds, commons, enclosures, and parks, now or that hereafter may be under the general charge of the Park Commissioners, shall children use a velocipede without the written permit of the Park Commissioners."

In Section 25, by striking out the words "bicycle" and "tricycle" in the second line thereof.

In Section 32, by striking out the word "bicycle" in the third line thereof.

As amended, the before mentioned sections will read as follows: —

Sect. 16. No person shall coast upon a sled on any street of this city without the written permission of the mayor; and

without such written permission no person, in any public street or square of this city, shall ride a bicycle or tricycle at a rate of speed exceeding ten miles an hour, and only for the time, and upon such portions of the public ways, streets, or squares aforesaid as may be specified in said permit. Such reasonable conditions shall be attached to such permits as the mayor may deem proper, and in accord with the circumstances and for the occasion for which the permits may respectively be granted. Between the hours of eight o'clock in the morning and five o'clock in the afternoon, children under the age of fourteen years may use velocipedes on any sidewalk in any public way, street, or square of this city. In no part of any public grounds, commons, enclosures, and parks, now or that hereafter may be under the general charge of the Park Commissioners, shall children use a velocipede without the written permit of the Park Commissioners.

Sect. 25. No person shall drive, ride, wheel, or draw any coach, cart, or other carriage, or permit any horse, cattle, swine, or sheep, under his care, to go upon any sidewalk, except for the purpose of crossing as nearly as may be at right angles to such sidewalk, in order to go into or out of some adjoining enclosure; provided that this section shall not apply to children's carriages or sleds containing children and drawn by hand; nor shall he otherwise occupy, obstruct, injure, or encumber any such sidewalk so as to interfere with the convenient use of the same by travellers.

Sect. 32. No person shall carry or cause to be carried upon any common or other public grounds a wheelbarrow, hand cart, or other vehicle for the conveyance of burdens, or for pleasure, except children's carriages.

[*Approved Dec.* 5, 1894.]

An Ordinance in Amendment of an Ordinance Entitled Inspection and Supervision of Electric Wires.

Be it ordained by the City Council of the City of Cambridge, as follows: —

That Section 24 of Chapter 14 of the Revised Ordinances

of 1892 be and hereby is amended by striking out, in the last line of said section, all after the word "arm" and inserting instead thereof the words "and no additional wire or wires shall be affixed to or placed upon any post, structure, or fixture now erected or that may hereafter be erected by any corporation or person maintaining or operating a wire or line of wires for the transmission of electricity except upon the written permission of the inspector of wires," so that said section as amended shall read as follows: —

SECT. 24. Every corporation or person maintaining or operating a wire or line of wires for the transmission of electricity, shall, at all places where such line or wire is affixed to any post, structure, or fixture, mark such post, structure, or fixture in a clear, durable, and legible manner, and keep the same so marked with the name of the corporation or person maintaining or operating such line or wire; and when any line or wire shall be affixed to the post or fixture of another corporation or person, it shall be attached to a suitable cross-arm, which shall be marked and kept marked in a clear, durable, and legible manner with the name of the corporation or person maintaining or operating such line. No line or wire shall be attached to any pole or post by means of brackets or other side fixtures, nor shall the wires or lines of more than one party be placed on the same cross-arm, and no additional wire or wires shall be affixed to or placed upon any post, structure, or fixture now erected or that may hereafter be erected by any corporation or person maintaining or operating a wire or line of wires for the transmission of electricity, except upon the written permission of the inspector of wires.

[*Approved Dec.* 5, 1894.]

An Ordinance Establishing a Fire Limit and Relating to the Construction of Buildings Therein.

Be it ordained by the City Council of the City of Cambridge, as as follows: —

SECTION 1. No building more than one hundred and twenty-

five feet in height above the grade of the street shall hereafter be erected in this city, provided, however, that this restriction shall not apply to grain or coal elevators or sugar refineries, nor to steeples, domes, towers, or cupolas erected for strictly ornamental purposes, of fire-proof material, on buildings of the above height, or less.

SECT. 2. For the better protection of the lives and property of the inhabitants and other persons, it is hereby ordained that: The territory at and within the distance of three miles from the present City Hall be and is hereby established as a Fire Limit.

SECT. 3. Within the Fire Limit, so established, no structure or building of more than three stories in height, designed to be used in whole or in part as a public building, public or private institution, a public hotel, family hotel, apartment house, lodging house, tenement house, school house, church, theatre, public hall, place of assembly, or place of public resort, shall be erected within twenty feet of any other structure or building, unless the exterior walls of such structure or building to be erected are made of and covered with some incombustible material.

SECT. 4. Within the Fire Limit as established, all dwelling houses of more than two stories in height, now or that hereafter may be erected, and within the distance of ten feet from any other building or structure, shall be furnished with a front and rear stairway, or some other equally safe means of egress.

SECT. 5. Sections 24 to 34, inclusive, of the Acts of 1894, Chapter 481, shall apply to any building of three or more stories in height within this city, and are as follows: —

"SECT. 24. Every building now or hereafter used, in whole or in part, as a public building, public or private institution, school house, church, theatre, public hall, place of assemblage, or place of public resort, and every building in which ten or more persons are employed above the second story in a factory, work-shop, or mercantile or other establishment, and every hotel, family hotel, apartment house, boarding house, lodging house or tenement house in which ten or more persons lodge or

reside above the second story, and every factory, work-shop, mercantile or other establishment, the owner, lessee, or occupant of which is notified in writing by the inspector hereinafter mentioned that the provisions of this act are deemed by him applicable thereto, shall be provided with proper ways of egress, or other means of escape from fire, sufficient for the use of all persons accommodated, assembling, employed, lodging, or residing in such building, and such ways of egress and means of escape shall be kept free from obstruction, in good repair and ready for use. Every room above the second story in any such building, in which ten or more persons are employed, shall be provided, if the said inspector shall so direct in writing, with more than one way of egress by stairways on the inside or outside of the building, placed as near as practicable at opposite ends of the room; stairways on the outside of the building shall have suitable railed landings at each story above the first, and shall connect with each story by doors or windows, and such landings, doors, and windows shall be kept clear of ice and snow and other obstructions. Women or children shall not be employed in a factory, work-shop, or mercantile or other establishment in a room above the second story from which there is only one way of egress, if the said inspector shall so direct in writing. All doors and windows in any building subject to the provisions of this section shall open outwardly, if the said inspector shall so direct in writing. No portable seats shall be allowed in the aisles or passage-ways of such buildings during any service or entertainment held therein. The proscenium or curtain opening of all theatres shall have a fire-resisting curtain of some incombustible material, and such curtain shall be properly constructed, and shall be operated by proper mechanism; the certificate of the said inspector shall be conclusive evidence of a compliance with such requirements.

"SECT. 25. No building designed to be used, in whole or in part, as a public building, public or private institution, school house, church, theatre, public hall, place of assemblage, or place of public resort, and no building more than two stories in height, designed to be used above the second story, in whole or in part, as a factory, work-shop, or mercantile or other

establishment, and having accommodations for ten or more employees above said story, and no building more than two stories in height designed to be used above the second story, in whole or in part, as a hotel, family hotel, apartment house, boarding house, lodging house, or tenement house, and having ten or more rooms above said story, shall hereafter be erected until a copy of the plans of such building has been deposited with the inspector of factories and public buildings for the district in which such building is to be located by the person causing the erection or construction of such building, or by the architect who has drawn such plans, which plans shall include therein the system or method of ventilation provided for such building, together with a copy of such portion of the specifications of such building as such inspector may require, nor shall any such building be so erected without the provision of sufficient ways of egress and other means of escape from fire properly located and constructed. The certificate of the inspector above named, endorsed with the approval of the chief of the district police force, shall be conclusive evidence of a compliance with the provisions of this act; provided that after the granting of such certificate, no change is made in the plans of specifications of such ways of egress and means of escape, unless a new certificate is obtained therefor. Such inspector may require that proper fire stops shall be provided in the floors, walls, and partitions of such buildings, and may make such further requirements as may be necessary or proper to prevent the spread of fire therein of its communication from any steam boiler or heating apparatus; and no pipe for conveying hot air or steam in such building shall be placed nearer than one inch to any woodwork, unless protected to the satisfaction of such inspector, by suitable guards or casings of incombustible material, and no wooden flue or air duct for heating or ventilating purposes shall be placed in any such building.

"SECT. 26. Any person erecting or constructing a building, or any architect or other person who shall draw plans or specifications or superintend the erection or construction of a building, in violation of the provisions of this act, shall be punished

by a fine of not less than fifty nor more than one thousand dollars, and such erection or construction may be enjoined in a proceeding to be had before the superior or supreme judicial court at the instance of the inspector above named; and upon the filing of a petition for such injunction, any justice of the court may issue a temporary injunction or restraining order, as provided in proceedings in equity.

"SECT. 27. It shall be the duty of such inspectors of factories and public buildings as may be assigned to such duty by the chief of the district police force, to examine, as soon as may be after the passage of this act, and thereafter, from time to time, all buildings within his district subject to the provisions of this act. In case any such building conforms, in the judgment of such inspector, to the requirements of this act, he shall issue to the owner, lessee, or occupant of such building, or of any portion thereof used as above mentioned in Section 24 of this act, a certificate to that effect, specifying the number of persons for whom the ways of egress and means of escape from fire are deemed to be sufficient; such certificate shall be conclusive evidence, as long as it continues in force, of the compliance on the part of the person to whom it is issued with the provisions of this act; but such certificate shall be of no effect in case a greater number of persons than therein specified are accommodated or employed, or assemble, lodge, or reside within such building or portion thereof, or in case such building is used for any purposes materially different from those for which it was used at the time of the granting thereof, or in case the internal arrangements of such building are materially altered, or in case any ways of egress or means of escape from fire existing in such building at the time of such granting are stopped up, rendered unavailable, or materially changed; and in no case shall such certificate continue in force for more than five years from its date. Such certificate may be revoked by such inspector at any time upon written notice to the person holding the same, or occupying the premises for which it was granted, and shall be so revoked whenever, in his opinion, any conditions or circumstances have so changed that the existing ways of egress and means of escape are no longer proper and sufficient.

A copy of the said certificate shall be kept posted in a conspicuous place, upon every floor of such building, by the person occupying the premises covered thereby.

"SECT. 28. Upon an application being made to an inspector for the granting of a certificate under this act, he shall issue to the person making the same an acknowledgment that such certificate has been applied for; and pending the granting or refusal of such certificate, such acknowledgment shall have, for a period of ninety days, the same effect as such certificate, and such acknowledgment may be renewed by such inspector with the same effect for a further period not exceeding ninety days, and may be further renewed by the chief of the district police force, until such time as such certificate shall be granted or refused.

"SECT. 29. In case any change is made in any premises for which a certificate has been issued under this act, whether in the use thereof or otherwise, such as terminates the effect of such certificate, as above provided in Section 27, it shall be the duty of the person making the same to give written notice thereof forthwith to the inspector for the district, or to the chief of the district police.

"SECT. 30. In case any building, or portion thereof, subject to the provisions of this act, is found by an inspector to fail to conform thereto, or in case any change is made in such building or portion thereof, such as terminates the effect of a certificate formerly granted therefor as aforesaid, it shall be the duty of such inspector to give notice in writing to the owner, lessee, or occupant of such building, specifying and describing what additional ways of egress or means of escape from fire are necessary, in the opinion of such inspector, in order to conform to the provisions of this act, and to secure the granting of a certificate as aforesaid. Notice to any agent of such owner, lessee, or occupant in charge of the premises shall be sufficient notice under this section to such owner, lessee, or occupant.

"SECT. 31. In case any building subject to the provisions of this act is owned, leased, or occupied, jointly or in severalty, by different persons, any one of such persons shall have the right to apply to any part of the outside of such building and

to sustain from any part of the outside wall thereof, any way of egress or means of escape from fire specified and described by an inspector as above provided, notwithstanding the objection of any other such owner, lessee, or occupant; and any such way of egress or means of escape may project over the highway.

"SECT. 32. When a license is required by law or municipal ordinance, in order to authorize any premises to be used for any purpose mentioned in Section 24, no license for such purpose shall be granted until a certificate for such building or portion thereof shall first have been obtained from an inspector as above provided, and no such license hereafter issued shall continue in force any longer than such certificate remains in force.

"SECT. 33. No wooden flue or air duct for heating or ventilating purposes shall hereafter be placed in any building subject to the provisions of Section 24 of this act, and no pipe for conveying hot air or steam in such building shall be placed or shall remain placed nearer than one inch to any woodwork, unless protected to the satisfaction of the said inspector by suitable guards or casings of incombustible material.

"SECT. 34. Every story above the second of a building subject to the provisions of Section 24 of this act shall be supplied with means of extinguishing fire, consisting either of pails of water or other portable apparatus, or of a hose attached to a suitable water supply and capable of reaching any part of such story; and such means of extinguishing fire shall be kept at all times ready for use and in good condition."

SECT. 6. In this ordinance the following terms shall have the meanings respectively assigned to them: —

"Height of a building" means the vertical distance of the highest point of the roof above the highest grade of the street or ground at the principal point of the building, provided said grade of the ground is not below the grade of the street at said point.

"Story of a building" means that portion of the building

between the level of the bottom of the floor beams and the top of the ceiling beams of that story.

"Public building" means any building or premises used as a place of public entertainment, institution, resort, or assemblage.

"Family hotel" means a hotel arranged more especially for the convenience and comfort of families.

"Apartment house" means a house divided up into sets or suites of rooms.

"School house" means any building or premises in which public or private instruction is afforded for not less than ten pupils at one time.

"Tenement house" means a building which or any portion of which is occupied or intended to be occupied as a dwelling by more than three families living independently of one another, and doing their cooking upon the premises.

"Theatre" means a building or portion of a building in which it is designed to make a business of the presentation of dramatic, operatic, or other performances or shows for the entertainment of spectators, and having a permanent stage for said performances which can be used for scenery and other stage appliances.

SECT. 7. Any person or corporation violating any provision of this ordinance shall be punished by a fine not exceeding twenty dollars for each offence.

[*Approved Dec.* 5, 1894.]

An Ordinance in Relation to Truants.

Be it ordained by the City Council of the City of Cambridge, as follows: —

Chapter 34 of the Revised Ordinances of 1892 is hereby repealed, and in place thereof the following is inserted: —

CHAPTER 34.

TRUANTS.

SECTION 1. Any minor, between the ages of seven and

fifteen years, convicted of being an habitual truant, or wandering about in the streets or public places of Cambridge, having no lawful occupation or business, not attending school, and growing up in ignorance, and such children as persistently violate the reasonable rules and regulations of the public schools, shall be committed to the Middlesex Truant School for a term not exceeding two years. The Middlesex County Truant School is the place provided for the confinement, discipline, and instruction of such children.

[*Approved Dec.* 19, 1894.]

An Ordinance in Relation to the Salary of the Assessors.

Be it ordained by the City Council of the City of Cambridge, as follows : —

On and after the first day of December, 1894, the salary of the assessors shall be at the rate of Two thousand Dollars a year each.

[*Approved Dec.* 19, 1894.]

An Ordinance in Relation to the Ambulance Department.

Be it ordained by the City Council of the City of Cambridge, as follows : —

SECT. 1. The Ambulance Department shall be under the charge of a superintendent of ambulances, who shall hold office for the term of one year from the first day of June in the year of his appointment, and until his successor is duly appointed and confirmed.

SECT. 2. He shall within the city limits direct and control the transportation of all injured persons and other persons ill with non-communicable diseases who need or require assistance to or from hospitals or their homes.

SECT. 3. When requested by the Board of Health, he shall attend to and properly transport and convey persons ill with communicable diseases, to such places and at such times as the Board of Health shall direct.

SECT. 4. He shall employ suitable persons to assist, and

shall provide and contract, under the ordinances, for suitable materials, appliances, and means to carry out and accomplish the provisions of this ordinance, and shall be responsible for the faithful and complete execution of the same.

SECT. 5. He shall keep an accurate account of all materials, appliances, and property purchased as aforesaid and used in this department, and make a quarterly report thereof to the mayor.

SECT. 6. He shall annually, in the month of December, present to the City Council a report showing the detailed expenses, the material and the property on hand, the number of accidents and other cases attended to, and other facts in relation to the department.

SECT. 7. He shall receive such salary as shall be fixed by the City Council.

[*Approved Dec.* 29, 1894.]

An Ordinance in Amendment of Certain City Ordinances.

Be it ordained by the City Council of the City of Cambridge, as follows: —

The Revised Ordinances of 1892 are hereby amended in the follow chapters, namely: —

In Chapter 1, Section 16, by inserting before the words "Assessors Department" the following, namely: "Ambulance Department," so that said section as amended shall read as follows: —

SECT. 16. The following departments are hereby created, namely: —

Ambulance Department.
Assessors Department.
Auditing Department.
Bridge Department.
Cemetery Department.
City Clerk Department.
City Messenger Department.
Clerk of Committees Department.
Engineering Department.

Fire Department.
Health Department.
Inspection and Construction of Buildings Department.
Inspection and Supervision of Electric Wires Department.
Inspection of Milk and Vinegar Department.
Lamp Department.
Law Department.
Overseers of the Poor Department.
Park Department.
Police Department.
Public Library Department.
Sealer of Weights and Measures Department.
Sewer Department.
Sinking Fund Department.
Street Department.
Treasury Department.
Water Works Department.

Each of the several departments shall be under the charge and management of the officers or boards designated in the respective chapters relating thereto, all under the general supervision and control of the mayor.

In Chapter 11, Section 10, after the clause headed "In April," and before the clause headed "In June," and before the sixty-third line by inserting at said place the following, namely:

(For one year from the first day of June.)

"A superintendent of ambulances,"

So that said Section 10 shall read at said place as follows:—

In April.

(For one year from the first day of May.)

A superintendent of streets.
A superintendent of lamps.
A city engineer.
One or more inspectors of provisions and of animals intended for slaughter, or kept for the production of milk.

(For three years from the first Wednesday in May.)

Two commissioners on the sinking funds of the city.

(For one year from the first day of June.)

A superintendent of ambulances.

[*Approved Dec.* 29, 1894.]

MAYORS OF THE CITY OF CAMBRIDGE.

From 1846 to 1895.

James D. Green . . .	from	May,	1846,	to April,	1848
Sidney Willard . . .	"	April,	1848,	to April,	1851
George Stevens . . .	"	April,	1851,	to April,	1853
James D. Green . . .	"	April,	1853,	to April,	1854
*Abraham Edwards . .	"	April,	1854,	to January,	1855
Zebina L. Raymond . .	"	January,	1855,	to January,	1856
John Sargent	"	Jaunary,	1856,	to January,	1860
†James D. Green . . .	"	January,	1860,	to July 24,	1861
‡Chas. Theo. Russell .	"	July 31,	1861,	to January,	1863
George C. Richardson .	"	January,	1863,	to January,	1864
Zebina L. Raymond . .	"	January,	1864,	to January,	1865
J. Warren Merrill . .	"	January,	1865,	to January,	1867
Ezra Parmenter . . .	"	January,	1867,	to January,	1868
Chas. H. Saunders . .	"	January,	1868,	to January,	1870
Hamlin R. Harding . .	"	January,	1870,	to January,	1872
Henry O. Houghton . .	"	January,	1872,	to January,	1873
Isaac Bradford . . .	"	January,	1873,	to January,	1877
Frank A. Allen . . .	"	January,	1877,	to January,	1878
Samuel L. Montague .	"	January,	1878,	to January,	1880
James M. W. Hall . .	"	January,	1880,	to January,	1881
James A. Fox	"	January,	1881,	to January,	1885
William E. Russell . .	"	January,	1885,	to January,	1889
Henry H. Gilmore . .	"	January,	1889,	to January,	1891
Alpheus B. Alger . .	"	January,	1891,	to January,	1893
William A. Bancroft .	"	January,	1893.	Now in office.	

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*Municipal year changed. †Resigned. ‡First elected by the City Council.

GOVERNMENT OF THE CITY OF CAMBRIDGE. 1895.

Mayor.

HON. WILLIAM A. BANCROFT, 5 Putnam Avenue.

Board of Aldermen.

President.

JOHN R. FAIRBAIRN.

Ward One.

RUSSELL BRADFORD . . .	375 Harvard St.
MARSHALL N. STEARNS . .	44 Wallace St.

Ward Two.

CHARLES M. CONANT . .	22 Lee St.
ANDREW J. RADY . . .	254 Broadway.
PETER F. ROURKE . . .	197 Harvard St.

Ward Three.

PETER P. BLEILER . . .	60 Spring St.
JOHN R. FAIRBAIRN . . .	440 Cambridge St.

Ward Four.

CLARENCE H. DOUGLASS .	34 Western Ave.
CHARLES P. KEITH . . .	114 Magazine St.

Ward Five.

WATSON G. CUTTER . . .	37 Linnæan St.
JAMES A. WOOD	1691 Massachusetts Ave.

Clerk.

WALTER W. PIKE.

Common Council.

President.

JOHN L. ODIORNE.

Ward One.

MELVILLE C. BEEDLE	31 Wendell St.
ALFRED B. PARKER	40 Holworthy St.
WILLIAM B. REID	25 Ellery St.
WALTER C. WARDWELL	465 Broadway.

Ward Two.

WILLIAM R. DAVIS	418 Columbia St.
J. WALTER FARRELL	1530 Cambridge St.
JOHN L. ODIORNE	287 Harvard St.
CLEMENT G. MORGAN	309 Columbia St.
JOHN E. SMITH	111 Norfolk St.

Ward Three.

JOHN J. AHERN	105 Spring St.
WILLIAM T. McGUIRE	144½ Spring St.
CORNELIUS MINIHAN	24 Spring St.
FRANK H. WILLARD	408 Cambridge St.

Ward Four.

GEORGE ALLEN	7 Sidney St.
DANIEL S. COOLIDGE	27 William St.
EDWIN A. CUTTING	71 Allston St.
ORIGEN O. PREBLE	204 Pearl St.
GEORGE B. WHITMORE	97 Henry St.

Ward Five.

ALBERT S. APSEY	11 Cogswell Ave.
ROBERT A. PARRY	77 Rice St.

Clerk.

EDWARD J. BRANDON.

Page.

CHARLES M. JONES.

City Clerk.

WALTER W. PIKE.

Assistant City Clerk.

EDWARD J. BRANDON.

City Messenger.

FRANCIS L. PRATT.

COMMITTEES OF THE CITY COUNCIL.

Joint Standing Committees.

Accounts. Aldermen Rady and Bradford. Councilmen Cutting, Ahern, and Smith.

Almshouse. Aldermen Wood and Rady. Councilmen Allen, Minihan, and Beedle.

Assessors. Alderman Cutter. Councilmen Minihan and Coolidge.

City Engineering. Aldermen Conant and Douglass. Councilmen Davis, McGuire, and Parry.

Claims. President Fairbairn. Aldermen Rady, Cutter, and Douglass. President Odiorne. Councilmen Reid, Whitmore, Morgan, Ahern, and Parry.

Electric Wires. Aldermen Douglass and Rourke. Councilmen Smith, Wardwell, and Preble.

Finance. President Fairbairn. Aldermen Rady, Bradford, and Cutter. President Odiorne. Councilmen Parker, McGuire, Allen, Farrell, and Apsey.

Fire Department. Aldermen Bleiler and Wood. Councilmen Reid, Davis, and Willard.

Health. Aldermen Stearns and Douglass. Councilmen Davis, Willard, and Cutting.

Lamps. Aldermen Bleiler and Conant. Councilmen Whitmore, Minihan, and Parry.

Ordinances. Aldermen Rady and Bradford. Councilmen Reid, Coolidge, and Apsey.

Printing. Aldermen Bleiler and Wood. Councilmen Reid, Allen, and Whitmore.

Public Instruction. Aldermen Bradford and Bleiler. Councilmen Parker, McGuire, and Morgan.

Public Property. Aldermen Stearns and Keith. Councilmen Beedle, Smith, and Coolidge.

Roads and Bridges. Aldermen Rourke and Stearns. Councilmen Davis, Minihan, and Wardwell.

Rules and Orders. Aldermen Bradford and Rourke. Councilmen Farrell, Preble, and Willard.

Water Supply. Aldermen Keith and Wood. Councilmen Farrell, Parry, and Cutting.

Legislative Matters. President Fairbairn. Aldermen Bradford and Conant. President Odiorne. Councilmen Parker, Preble, and Apsey.

Standing Committees of the Board of Aldermen.

Bonds. Aldermen Stearns, Rady, and Douglass.

Claims. President Fairbairn. Aldermen Rady, Cutter, and Douglass.

Fire Department. Aldermen Bleiler, Wood, and Keith.

Health. Aldermen Stearns, Rourke, and Douglass.

Licenses. Aldermen Stearns, Bradford, and Conant.

Police. President Fairbairn. Aldermen Bradford and Wood.

Roads and Bridges. Aldermen Rourke, Stearns, and Cutter.

Sewers. Aldermen Bleiler, Keith, and Conant.

Street Railways. Aldermen Rourke, Stearns, and Bleiler.

Rules and Orders. Aldermen Bradford, Rourke, and Wood.

Elections and Returns. Aldermen Rady, Bradford, and Douglass.

Soldiers' Aid. Aldermen Rourke, Bradford, Bleiler, Keith, and Wood.

Committees of the Common Council.

Bills in the Second Reading. Councilmen Whitmore, Wardwell, and Ahern.

Elections and Returns. Councilmen Morgan, Beedle, and Coolidge.

Enrolled Ordinances. Councilmen Allen, Farrell, and Preble.

Clerk of Committees.

John McDuffie.

City Auditor.

Harry T. Upham.

City Treasurer.

William W. Dallinger.

Board of Health.

E. Edwin Spencer, M. D., *City Physician, ex officio.*

(Term, three years. From 1895.)

Edmund M. Parker (appointed 1894).
Charles Harris (appointed 1895).

(Term, two years.)

Clerk.

James B. Soper.

Health Officer.

Edwin Farnham, M. D.

Surveyor of Highways.

His Honor, the Mayor.

Assessors.

Andrew J. Green (term expires 1895).
Joshua G. Gooch (term expires 1896).
Samuel L. Montague (term expires 1897).

(Term, three years.)

Assistant Assessors.

Warren Ivers.
John M. Davis.
Daniel B. Shaughnessy.
George D. Wellington.
Edwin K. Hall.

School Committee.

William A. Bancroft, Mayor, *ex officio*, *Chairman.*

WARD I.

Ellen A. Goodwin (term expires 1895).
Albert B. Hart (term expires 1896).
William T. Piper (term expires 1897).

WARD II.

Alphonso E. White (term expires 1895).
Robert O. Fuller (term expires 1896).
Caroline L. Edgerly (term expires 1897).

WARD III.

Anne Clark Stewart (term expires 1895).
Edward B. Malley (term expires 1896).
William H. Clancy (term expires 1897).

WARD IV.

William A. Munroe (term expires 1895).
Mary E. Mitchell (term expires 1896).
Charles F. Wyman (term expires 1897).

WARD V.

Frederic W. Taylor (term expires 1895).
George P. Johnson (term expires 1896).
Carolyn P. Chase (term expires 1897).

(Term, three years.)

Secretary.

Sanford B. Hubbard.

Superintendent of Schools.

Francis Cogswell.

Overseers of the Poor.

Charles E. Vaughan, *Chairman.*

Charles Bullock (term expires 1895).
Charles Walker (term expires 1896).
Stephen Anderson (term expires 1897).
Charles E. Vaughan (term expires 1898).
William W. Burrage (term expires 1899).

(Term, five years.)

Secretary.

David P. Muzzey.

Visitor.

Vespasian Danforth.

Warden of the Almshouse.

Martin L. Eldridge.

Assistant City Physician.

Lewis L. Bryant, M. D.

[Elected in April by the Overseers of the Poor, subject to the approval of the Board of Aldermen.]

Cambridge Cemetery.

Commissioners.

George S. Saunders, *Chairman.*

George S. Saunders (term expires 1896).
Herbert A. Chase (term expires 1896).
William A. Bertsch (term expires 1897).
Charles O. Welch (term expires 1897).
John H. H. McNamee (term expires 1898).
Nathan C. Lombard (term expires 1898).

(Term, three years.)

Superintendent.

Charles S. Childs.

Trustees of the Cambridge Public Library.

Albert M. Barnes, *President.*
William T. Piper, *of School Committee.*

Citizens at Large.

Jabez Fox (term expires 1896).
Albert M. Barnes (term expires 1896).
Augustine J. Daly (term expires 1897).
William J. Rolfe (term expires 1897).
Samuel L. Montague (term expires 1898).
Thomas W. Higginson (term expires 1898).
(Term, three years.)

Librarian.

W. L. R. Gifford.

Cambridge Water Board.

George H. Howard (term expires 1895).
James M. W. Hall, *President* (term expires 1896).
Stillman F. Kelley (term expires 1897).
E. Burt Phillips (term expires 1898).
Frank A. Allen (term expires 1899).
(Term, five years.)

Clerk.

Walter H. Harding.

Superintendent of Water Works.

John L. Harrington.

Pumping Engineer.

Edwin C. Brooks.

Water Registrar.

Walter H. Harding.

Park Commissioners.

Geo. Howland Cox, *Secretary* (term expires 1895).
Henry D. Yerxa, *President* (term expires 1896).
Rev. John O'Brien (term expires 1897).
(Term, three years.)

General Superintendent of Parks.

George R. Cook.

Trustees of Sinking Fund of Water Loan.

The Mayor, City Treasurer, and President of the Common Council, *ex-officiis.*

Commissioners on Sinking Funds of the City.

Charles H. Saunders (term expires 1895).
Frank A. Allen (term expires 1895).
John C. Bullard (term expires 1896).
George H. Howard (term expires 1896).
Henry O. Houghton (term expires 1897).
Andrew J. Lovell (term expires 1897).

(Term, three years.)

Trustees of the Sanders Temperance Fund.

The Mayor, the President of the Board of Aldermen, and the President of the Common Council, *ex-officiis.*

Trustees of the Bridge Charitable Fund.

The Mayor, the President of the Board of Aldermen, and the President of the Common Council, *ex-officiis.*

Trustees of the Dowse Institute.

The Mayor and the President of the Common Council, *ex-officiis.*
William W. Wellington. Willard A. Bullard,
Frank A. Allen.

Senators in General Court.

William B. Durant.
Third Middlesex District, Wards 1, 2, 4, 5.

Michael B. Gilbride.
Third Suffolk District, Ward 3.

Representatives in General Court.

David T. Dickinson. John T. Shea.
James J. Myers. Sumner C. Higgins.
Frederick W. Dallinger. Warren F. Spaulding.
Wellington Fillmore.

Registrars of Voters.

James Cox (term expires May 1, 1895).
William J. Breen (term expires May 1, 1896).
Frank H. Teele, *Clerk* (term expires May 1, 1897).
Isaac Bradford, *Chairman* (term expires May 1, 1898.)
One appointed annually, in March or April, to hold office four years.

Third District Court of Eastern Middlesex.

Standing Justice.

Charles Almy.

Special Justices.

Samuel W. McDaniel. Augustine J. Daly.

Clerk.

Emerson W. Law.

Probation Officer.

Frederick W. Hagar.

City Solicitor.

Gilbert A. A. Pevey.

City Engineer.

Lewis M. Hastings.

Superintendent of Sewers.

Theodore L. Pike.

Inspector of Wires.

Charles H. Morse.

Commissioner on West Boston, Craigie's, Prison Point, and Harvard Bridges.

William J. Marvin.

Harbor Master.

William J. Marvin.

Superintendent of Streets.

Charles A. Brown.

Superintendent of Public Buildings.

William H. Gray.

Superintendent of Lamps.

Charles H. Morse.

Superintendent of Ambulances.

Lewis L. Bryant, M. D.

Board of Engineers.

Chief Engineer.

Thomas J. Casey.

Call District Chiefs.

Nathaniel W. Bunker. Charles W. Brackett.

William B. Cade.

Police Department, 1895.

Chief of Police.

Lothrop J. Cloyes.

Captains of Police.

DISTRICT NO. 1.	DISTRICT NO. 2.	DISTRICT NO. 3.
Thomas H. Lucy.	John F. Murray.	Mark J. Folsom.

Inspector.

James E. Murray.

Clerk.

Charles W. Priest.

Court Officer.

Sergt. William F. Batchelder.

Sergeants of Police.

DISTRICT NO. 1.	DISTRICT NO. 2.	DISTRICT NO. 3.
Daniel Callahan.	James S. Alexander.	Dennis Corcoran.
Fred. B. Pullen.	Charles L. Pike.	William Mullett.
Andrew Sproul.		

Patrolmen.

With the Numbers of their Badges.

DISTRICT No. 1.

No. of Badge.		No. of Badge.	
7	George T. Barrington.	67	Dennis F. Leahy.
28	Edward F. Belcher.	44	Charles C. Marston.
53	Elbridge S. Blen.	55	John P. Maloy.
69	Michael J. Brennan.	10	John J. McBride.
29	Michael J. Conry.	16	Edward J. McCabe.
20	Timothy Corcoran.	1	John E. McCrehan.
56	John Coulter.	26	James E. McElroy.
25	Edward J. Comerford.	57	Hugh J. McNamee.
40	Patrick Doyle.	18	James E. McNulty.
8	Joseph H. Furbush.	76	William N. Mullins.
2	William H. Graves.	62	Bernard J. Roper.
49	Simon D. Hiscock.	6	Leonard Shackford.
47	Robert T. Hixon.	21	George Smythe.
22	Moses W. Hooper.	65	John E. Shaughnessy.
58	James H. H. Holt.	42	John H. Wells.
17	Dexter Jewett.	80	Edward J. Welch.
32	James M. Keaney.	3	Orrin B. White.
35	Fred. L. Ladd.	48	John E. Winslow.

DISTRICT No. 2.

No. of Badge.		No. of Badge.	
51	Richard H. Aylward.	30	Jeremiah McCarthy.
34	Michael Culhane.	13	Benjamin McKeen.
68	John W. Deehan.	64	William H. McMenimen.
50	Thomas F. Dynan.	75	Simon J. Mulvaney.
74	James B. Forristall.	45	Patrick F. Murray.
38	Michael A. Ginty.	43	Robert E. Mullen.
41	John J. Griffiths.	4	Michael Neilon.
82	Mortimer M. Hackett.	59	Thomas J. Real.
77	John A. Hezlitt.	70	Fred. A. Robinson.
14	Benjamin F. Higgins.	31	William H. Robertson.
33	William H. H. Howe.	73	Thomas P. Rowe.
11	Henry C. Jones.	78	William H. Rowe.
23	Frederick W. Law.	24	David A. Stevens.
79	Edward J. Malley.	61	Cornelius Sullivan.
72	Bernard McCaffrey.	54	John Wiley.

DISTRICT No. 3.

No. of Badge.		No. of Badge.	
5	Frederick Apel.	60	Michael F. Lamb.
36	William A. Butcher.	27	Charles J. McCann.
66	Francis J. Coghlan.	39	Joseph F. McCorry.
71	Daniel F. Counihan.	15	William F. McKeown.
81	Herbert Gordon.	19	Benjamin C. Scully.
9	James P. Hall.	46	Frank W. Scobey.
12	Timothy J. Hartnett.	63	John W. Skelley.
37	Patrick F. Hurley.		

Drivers of Patrol Wagons.

John T. Cook.	John Sullivan.
John J. McCauley.	John Coffey.

Matrons.

Mrs. E. S. Haines.	Mrs. A. M. Stearns.

Policemen without Pay (within the Civil Service).

William H. Aberle.
Horace A. Allyn.
John A. Austin.
Richard Balmer.
John A. Bartlett.
Charles W. Brackett.
James T. Brassil.
Timothy J. Breen.
James K. Bresnan.
James Burke.
Daniel A. Buckley.
Ferdinand N. Buffum.
Nathaniel W. Bunker.
William Burgess.
Samuel Busnach.
William B. Cade.
William H. Cairns.
Thomas J. Casey.
James Carter.
Moses M. Child.
Charles S. Childs.
Ambrose H. Clark.
Noah M. Cofran.
Patrick Corcoran.
Vespasian Danforth.
Abner R. Davis.
Daniel K. Dinsmore.
Patrick F. Dunlea.
Martin L. Eldridge.
Thomas Flynn.
Oliver G. Fosdick.
William Foster.
James H. Furfey.
James J. Garvin.
Charles A. Gay.
Eli L. Goodrow.
James Grant.
Henry L. Hale.
John L. Harrington.
Thomas L. Harrington.
Thomas M. Howard.
J. Lewis Howe.
William Hunnewell.
Samuel F. Hunt.
Thomas W. Jones.
John Kelleher.
Conrad D. Kinnear.
William B. Lehmkuhl.
James W. Lovering.
James H. Lyons.
Francis M. Mason.
John H. McCarthy.
John R. McPeake.
George W. Montgomery.
Thomas Montgomery.
Dennis Murphy.
Nathaniel M. Neal.
Augustus W. Nelson.
James H. Newman.
Francis A. Osborn.
George A. Parmenter.
Francis L. Pratt.
Charles L. Russell.
Charles M. Sanborn.
John F. Sharkey.
John T. Shea.
Edward Smith.
David H. Walsh.
Clarence H. Whiting.
George Wood.

Policemen without Pay.

Antonio Francis.
Harry Ellis.
Patrick Cronin.
Alex. F. Shepherd.
Joseph S. Skelton.
Frank C. Hatch.
George P. Knowlton.
Rufus S. Downe.
John Clark.
John A. O'Connor.
Charles O. Dam.
Rudolph Erkhart.
William L. Lyon.
James C. Scorgie.
James F. Dunn.
Charles W. Dailey.
Frederick Clover.
Patrick Clark.
Thomas H. McCourt.
Gideon H. Cloyes.
Edwin C. Brooks.
Edward W. White.
John E. Duffy.
John W. Hope.
Robert Alexander.
Armon A. Kiner.
John M. Day.
Harlam Z. Page.
John Dillon.
Frank Russell.
B. Frank Robinson.
Hartwell S. Pettes.
John L. Kirby.
Charles E. Bramhall.
Angus S. McDonald.
Samuel H. Swain.
Richard W. Sutton.
Horace D. Litchfield.
Frederick M. Ellis.
James E. Ferguson.
John I. Carroll.
Herbert E. Lombard.
James Doherty.
Walter J. Anderson.
Arthur F. Miller.
Jeremiah J. Long.
Charles E. W. Lawson.
Charles H. Morse.
William C. Pierce.
George A. Patten.
John T. Cook.
Charles I. Marston.
John Coffey.
John McCauley.
John H. Hollenback.
William H. Cutler.
John J. Shea.
Albert F. Roberts.
Irving H. Henderson.
John Sullivan.
James H. Parker.
David Garvin.
Frederick McKenzie.
Eliakim W. Hill.
George E. Goodwin.
Felix Desnoit.
Ralph R. Rice.
John Taylor.
Edward F. Chase.
William A. Ford.
Charles F. Aberle.
James T. Barrett.

James A. Gorman.
Samuel E. Tasco.
Edgar L. Wentworth.
Charles B. Gordon.
Robert A. Parry.
Melvin W. Perry.
Dennis J. Farrell.
Albert Murray.
Thomas M. Thomas.
Jere. Murphy.
John J. McCarthy.
Daniel V. Clark.
Merrill H. Bent.
Carlton A. Keith.

John Moulton.

Keeper of Lock-ups.

Lothrop J. Cloyes.

Truant Officers.

Moses M. Child.
Francis M. Mason.
John Carmichael.
William H. Porter.

Constables.

Cyril Wright.
Walter F. Hayward.
George T. Barrington.
William F. Batchelder.
Lothrop J. Cloyes.
John R. Fairbairn.
Arthur M. Stewart.
Mark J. Folsom.
Joseph Fox.
Appleton Hubbard.
John F. Murray.
Daniel B. Nash.
John W. Skelley.
Vespasian Danforth.
Thomas H. Lucy.
P. Allen Lindsey.
Warren Ivers.
John M. Davis.
Frank E. Shaw.
William A. Ford.
Edward F. Chase.
Edward M. Williams.
Thomas C. Scottron.
James E. Murray.
Julius M. Nazro.
John Loughrey.

James E. Lennon.

Undertakers.

John W. Coveney.
Thomas Devens.
Samuel F. Hunt.
George H. Kelley.
Judson Litchfield.
Benjamin F. Wyeth.

Joseph J. Kelley.
Horace D. Litchfield.
C. Henry Lockhart.
Abiel E. Long.
William Ross.
William A. Taylor.
George F. Ricker.
David Fudge.
John Ross.
Gustavus King.
James J. Shea.
James F. Mullen.
Henry A. Wyeth.
John T. Shea.
David F. Corcoran.
Alexander Marcille.
Ralph Smith.
Arthur S. Fudge.
John J. Loan.
John J. Murphy.
James McGovern.
Stephen Anderson.
George W. Long.
William H. Porter.
William Stinson.
James H. Ross.

Auctioneers.

John J. Ahern.
Daniel A. Buckley.
Watson G. Cutter.
John R. Fairbairn.
Edmund E. Sanborn.
Daniel J. Hayes.
Stephen H. Harrington.
P. Allen Lindsey.
Francis Traynor.
Leander M. Hannum.
Max Frankenstein.
William R. Ellis.
Charles L. Phillips.
Thomas C. Scottron.
Norman J. Campbell.
Cyril Wright.
John Mahady.
Walter B. Danforth.
John W. Coveney.
John F. Coolidge.
Walter C. Wardwell.
Paul Epstein.

Fence Viewers.

Lewis M. Hastings. Colin Chisholm. William H. Gray.

Field Drivers.

William F. Batchelder,
James S. Alexander,
Michael F. Lamb,
Frederick W. Law,

Daniel Callahan,
William Mullett,
Dennis Corcoran,
Charles L. Pike,
Frederick B. Pullen,
Andrew Sproul,
Richard H. Aylward,
Frederick Apel,
George T. Barrington,
Edward F. Belcher,
Elbridge S. Blen,
Michael J. Brennan,
William A. Butcher,
Francis J. Coghlin,
Michael J. Conry,
Timothy Corcoran,
John Coulter,
Michael Culhane,
Edward J. Comerford,
Daniel F. Counihan,
Thomas F. Dynan,
John W. Deehan,
Patrick Doyle,
James B. Forristall,
Joseph H. Furbush,
Michael A. Ginty,
Herbert Gordon,
William H. Graves,
John J. Griffith,
Mortimer M. Hackett,
James P. Hall,
John A. Hezlitt,
Timothy J. Hartnett,
Benjamin F. Higgins,
Simon D. Hiscock,
Robert T. Hixon,
Moses W. Hooper,
James H. H. Holt,
Dennis F. Leahy,
Charles C. Marston,
John P. Maloy,
Edward J. McCabe,
Bernard McCaffrey,
John J. McBride,
Joseph F. McCorry,
Jeremiah McCarthy,
John E. McCrehan,
Charles J. McCann,
James L. McElroy,
Benjamin McKeen,
William F. McKeown,
William H. McMennimen,
Hugh J. McNamee,
James E. McNulty,
Robert E. Mullen,
William N. Mullins,
Edward J. Malley,
Simon J. Mulvaney,
James E. Murray,
Patrick F. Murray,
Michael Neilon,
Charles W. Priest,
Thomas J. Real,
Bernard J. Roper,
Frederick A. Robinson,
William H. Robertson,
Thomas P. Rowe,
William H. Rowe,
Frank W. Scobey,
Benjamin C. Scully,
John E. Shaughnessy,
Leonard Shackford,
John W. Skelley,
George Smyth,
David A. Stevens,
Cornelius Sullivan,

William H. H. Howe,
Patrick F. Hurley,
Henry C. Jones,
Dexter Jewett,
James M. Keaney,
Fred L. Ladd,
Edward J. Welch,
John H. Wells,
Orrin B. White,
John Wiley,
John E. Winslow.

Measurers of Wood and Bark.

Herbert T. Lawrence.
Robert A. Parry.
Henry B. Sellon.
George Stephens.

Pound Keeper.

Robert Holden.

Committee for the Preservation of Fish.

Lewis M. Hastings.
Theodore L. Pike.
John L. Harrington.

Hay Weighers.

Thomas Gurnham.
Henry B. Sellon.

Coal Weighers.

Frank E. Bailey.
Hiram W. Brooks.
Silas E. Buck.
Edward E. Coye.
Walter F. Grieves.
Fred A. Humiston.
Herbert T. Lawrence.
Charles H. Lealand.
Thomas H. Matthews.
John Moynahan.
John E. A. Mulliken.
Amos Pettingill.
Frank H. Tyler.
Alfred H. Wellington.
Ernest H. Wellington.

Inspectors of Junk Shops, Pawnbrokers' Shops, and Second-hand Clothing Stores and Dealers.

Mark J. Folsom.
John F. Murray.
Thomas H. Lucy.
James E. Murray.

Sealer of Weights and Measures.

Albert F. Roberts.

Weighers.

Melville McFarland.
Alex S. Ford.
Stanley Jennison.
Leonard R. Bacon.
Isaac A. Chandler.
James W. Coleman.
John Guiney.
Charles F. Hittinger.
Nathan H. Holbrook.
Henry Hooker.
Alfred Morrill.
Robert S. Paine.
John Reardon, Jr.
Thomas H. Shea.
William Maloney.
Walter H. Murdock.
Frank H. Tyler.
James J. Scully.
Alexander Wight.
William L. Ducey.
Edward J. Carroll.
Robert Holden.
Edmund I. Train.

Inspector of Milk.

Frank A. Dunbar.

Inspector of Vinegar.

Frank A. Dunbar.

Inspector of Animals and Provisions.

Charles E. Hadcock.

Person to Receive Information of Damages done by Dogs. (Ch. 454, Acts of 1889.)

Lothrop J. Cloyes.

Inspector of Pressed or Bundled Hay and Straw.

Henry K. Parsons.

Persons to Cause to be Properly Interred the Bodies of Soldiers and Sailors.

Cornelius G. H. Bennink.
John W. Coveney.
John T. Shea.
William H. Eveleth.
Joseph J. Kelley.
Stephen Anderson.
George S. Evans.

Surveyors of Mechanics' Work.

Charles A. Mason.
John S. Pollard.

Measurer and Surveyor.

Henry L. Hale.

Inspector of Charcoal Baskets.

Albert F. Roberts.

Measurer of Grain.

Albert F. Roberts.

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